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UNITED STATES DEPARTMENT
OF COMMERCE

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UNITED STATES DEPARTMENT OF COMMERCE
OFFICE OF TECHNICAL SERVICES

BIBLIOGRAPHY
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—82288

APPAREL

PB 96580

Moore, William L.

Modification of type P-1 protective helmet and standard flying helmets for use by fighter and jet aircraft pilots. Dec 1948. 22p photos Mi $2.00 Ph $3.75

1. Helmets, Flying (Type A-10A)—Summer—Modification—United States 2. Helmets, Protective (Type P-1)—Modification—United States 3. AAF TSEAA MR 666-14B

PB 95835

Shaub, Howard G. and others.

Extremity protection at low temperatures with electrically heated clothing; and Heat distribution in electrically heated clothing. Oct 1948. 14p tables, charts Mi $1.75 Ph $2.50

1. Clothing, Electrically heated 2. AAF TSEAA MR 696-105J

CHEMICALS AND ALLIED PRODUCTS

Dyes

PB 70135t10

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Constitution of fanal dyes and the concept of pure dye content: Fanal yellow green G supra. Dec 1948. 4p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $3.00

Translation of PB 70135

1. Micro FIAT G 18, Frames 1430-1431, translation

PB 70135t7

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Fanal red B supra 100% moist, powder, and paste. Dec 1948. 7p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $11.25

Translation of PB 70135

1. Micro FIAT G 18, Frames 1487-1492, translation

PB 32532t133

I. G. Farbenindustrie A. G., Frankfurt am Main, Ger.

Fast red salt AL (AAC-DS). Dec 1948. 8p Available from Research Information Service, 509 5th Ave., New York 17 N. Y. $13.75

Translation of PB 32532

1. Micro QMC TSR 19 Reel 1, trans.

PB 74197s

I. G. Farbenindustrie A. G., Leverkusen, Ger.

Manufacture of intermediate products and dyestuffs. n.d. 9p Mi $1.25 Ph $1.25

Supplement 1 to PB 74197

1. Micro BIOS FD 235/47, Part 1, Frames 1-868, abstracts 2. Micro BIOS SO 1801/47, Part 1, Frames 1-868, abstracts

PB 70135t3

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Manufacturing process for eosin H8G. Dec 1948. 4p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $13.25

Translation of PB 70135

1. Micro FIAT G 18, Frames 1088-1090, translation

PB 70421t5

I. G. Farbenindustrie A. G., Offenbach, Ger.

Manufacturing process for naphthol AS-OL. Jan 1949. 12p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $13.00

Translation of PB 70421

1. Micro FIAT E 18, Frames 1403-1411, translation

PB 70135t9

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Orange for lipsticks. Dec 1948. 6p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $9.75

Translation of PB 70135

1. Micro FIAT G 18, Frames 1623-1627, translation

PB 32536t10

I. G. Farbenindustrie A. G., Frankfurt am Main, Ger.

p-Aminobenzoyl-dimethylaminoethanol: Process for manufacture. Dec 1948. 2p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $3.00

Translation of PB 32536

1. p-Aminobenzoyl-dimethylaminoethanol—Preparation—Germany 2. Chemicals—Preparation—Germany 3. Micro QMC TSR 19 V, translation

PB 70135t8

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Rhodamin base B extra. Jan 1949. 23p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $35.00

Translation of PB 70135

1. Micro FIAT G 18, Frames 1597-1615, translation

PB 85172s108

U. S. Office of Military Government for Germany.

Amino R-acid violet. Mar 1946. 1p (Text in German) Mi $1.25 Ph $1.25

Supplement 108 to PB 85172

1. Dyes and dyeing—Germany 2. Amino R-acid violet (Trade name) 3. I. G. Farbenindustrie A. G., Leverkusen, Ger. 4. FIAT FR 1313-108

PB 85172s27
U. S. Office of Military Government for Germany.
Anthrasol printing black IB. n.d. 4p tables Mi $1.25 Ph $1.25
Supplement 27 to PB 85172
1. Dyes and dyeing—Germany 2. Anthrasol printing black IB (Trade name) 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-27

PB 85172s94
U. S. Office of Military Government for Germany.
Benzoxazolone. Apr 1947. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 94 to PB 85172
1. Dyes and dyeing—Germany 2. Benzoxazolone—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-94

PB 85172s96
U. S. Office of Military Government for Germany.
Chloranil. Nov 1938. 6p tables (Text in German) Mi $1.25 Ph $1.25
Supplement 96 to PB 85172
1. Dyes and dyeing—Germany 2. Chloranil 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-96

PB 85172s113
U. S. Office of Military Government for Germany.
Chloranil. n.d. 2p Mi $1.25 Ph $1.25
Supplement 113 to PB 85172
1. Dyes and dyeing 2. Chloranil 3. I. G. Farbenidustrie A. G., Höchst, Ger. 4. FIAT FR 1313-113

PB 85172s26
U. S. Office of Military Government for Germany.
Chromaxane brilliant red BL, n.d. 3p Mi $1.25 Ph $1.25
Supplement 26 to PB 85172
1. Dyes and dyeing—Germany 2. Chromaxane brilliant red BL (Trade name) 3. I. G. Farbenindustrie A. G. 4. FIAT FR 1313-26

PB 85172s88
U. S. Office of Military Government for Germany.
Diazonium sulfate of 4-amino-3-methoxy diphenylamine (Varearnine blue F.G.). Feb 1932. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 88 to PB 85172
1. Dyes and dyeing—Germany 2. Diazonium compounds—Reactions—Germany 3. Diphenylamine, 4-Amino-3-methoxy—Production—Germany 4. Varearnine blue F.G. (Trade name) 5. I. G. Farbenindustrie A. G., Offenbach, Ger. 6. FIAT FR 1313-88

PB 85172s104
U. S. Office of Military Government for Germany.
Ethyl sulfinic acid. Feb 1936. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 104 to PB 85172
1. Dyes and dyeing—Germany 2. Sulfinic acid, Ethyl ester—Germany 3. I. G. Farbenindustrie A.G., Höchst, Ger. 4. FIAT FR 1313-104

PB 85172s29
U. S. Office of Military Government for Government.
Fanal blue B extra powder. Jan 1939. 3p (Text in German) Mi $1.25 Ph $1.25
Supplement 29 to PB 85172
1. Dyes and dyeing—Germany 2. Fanal blue B extra (Trade name) 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 4. FIAT FR 1313-29

PB 85172s31
U. S. Office of Military Government for Germany.
Fanal green G extra powder. Jan 1949. 3p (Text in German) Mi $1.25 Ph $1.25
Supplement 31 to PB 85172
1. Dyes and dyeing—Germany 2. Fanal green G extra (Trade name) 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 4. FIAT FR 1313-31

PB 85172s28
U. S. Office of Military Government for Germany.
Fanal red 6B extra powder. Feb 1939. 3p (Text in German) Mi $1.25 Ph $1.25
Supplement 28 to PB 85172
1. Dyes and dyeing—Germany 2. Fanal red 6B extra (Trade name) 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 4. FIAT FR 1313-28

PB 85172s32
U. S. Office of Military Government for Germany.
Fanal Violet R extra powder. Feb 1939. 3p (Text in German) Mi $1.25 Ph $1.25
Supplement 32 to PB 85172
1. Dyes and dyeing—Germany 2. Fanal violet R extra (Trade name) 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 4. FIAT FR 1313-32

PB 85172s30
U. S. Office of Military Government for Germany.
Fanal yellowish green G extra powder. Feb 1939. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 30 to PB 85172
1. Dyes and Dyeing—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 3. Fanal yellow green G extra (Trade name) 4. FIAT FR 1313-30

PB 85172s117
U. S. Office of Military Government for Germany.
Fast orange GGD base. Apr 1947. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 117 to PB 85172
1. Dyes and dyeing—Germany 2. Fast orange GGD base (Trade name) 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-117

PB 85172s116

U. S. Office of Military Government for Germany.
Fast orange RD base. n.d. 3p Mi $1.25 Ph $1.25
Supplement 116 to PB 85172
1. Dyes and dyeing—Germany 2. Fast orange RD base (Trade name) 3. I. G. Farbenindustrie A. G. 4. FIAT FR 1313-116

PB 85172s101

U. S. Office of Military Government for Germany.
5-Nitro-1:3-xylene hexafluoride. Apr 1947. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 101 to PB 85172
1. Dyes and dyeing—Germany 2. 1:3-Xylene hexafluoride, 5-Nitro—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-101

PB 85172s98

U. S. Office of Military Government for Germany.
5-Nitro-2-aminophenol. Apr 1947. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 98 to PB 85172
1. Dyes and dyeing—Germany 2. Phenol, 2-Amino-5-nitro—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-98

PB 85172s89

U. S. Office of Military Government for Germany.
4-Amino-3-methoxy diphenylamine. Jun 1937. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 89 to PB 85172
1. Dyes and dyeing—Germany 2. Diphenylamine, 4-Amino-3-methoxy—Production—Germany 3. I. G., Farbenindustrie A. G., Offenbach, Ger. 4. FIAT FR 1313-89

PB 85172s112

U. S. Office of Military Government for Germany.
4-Amino-3-methoxy diphenylamine. n.d. 4p tables Mi $1.25 Ph $1.25
Supplement 112 to PB 85172
1. Dyes and dyeing—Germany 2. Diphenylamine, 4-Amino-3-methoxy—Production—Germany 3. Blue base FG (Trade name) 4. I.G. Farbenindustrie A. G., Höchst, Ger. 5. FIAT FR 1313-112

PB 85172s114

U. S. Office of Military Government for Germany.
4'-Chloro-4-amino diphenylamine-2-sulfonic acid. n.d. 3p Mi $1.25 Ph $1.25
Supplement 114 to PB 85172
1. Dyes and dyeing—Germany 2. 2-Sulfonic acid, 4'-Chloro-4-amino diphenylamine—Germany 3. Chlorparaminsäur (Trade name) 4. I. G. Farbenindustrie A. G., Höchst, Ger. 5. FIAT FR 1313-114

PB 85172s102

U. S. Office of Military Government for Germany.
4-Trifluoromethyl-2-nitroanilime. Apr 1947. 5p (Text in German and English) Mi $1.25 Ph $1.25
Supplement 102 to PB 85172
1. Dyes and dyeing—Germany 2. Aniline, 2-nitro-4-trifluoromethyl—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-102

PB 85172s25

U. S. Office of Military Government for Germany.
Hydroxy trimellitic acid. Oct 1938. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 25 to PB 85172
1. Dyes and dyeing—Germany 2. Trimellitic acid 3. Hydroxy trimellitic acid (Trade name) 4. I. G. Farbenindustrie A. G. 5. FIAT FR 1313-25

PB 85172s105

U. S. Office of Military Government for Germany.
Nitrosyl sulfuric acid. Apr 1947. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 105 to PB 85172
1. Dyes and dyeing—Germany 2. Sulfuric acid—Derivatives—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-105

PB 85172s90

U. S. Office of Military Government for Germany.
1-Amino-4-benzoylamino-2-methyl-5-chlorobenzene. Sep 1938. 1p Mi $1.25 Ph 1.25
Supplement 90 to PB 85172
1. Dyes and dyeing—Germany 2. Benzene, 5-Chloro—1-Amino-4-benzoylamino-2-methyl—Germany 3. I. G. Farbenindustrie A. G., Offenbach, Ger. 4. FIAT FR 1313-90

PB 85172s95

U. S. Office of Military Government for Germany.
1:4 Di (para nitrobenzoyl amino) benzene-2-sulfonic acid. n.d. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 95 to PB 85172
1. Dyes and dyeing—Germany 2. Benzenesulfonic acid—Derivatives—Germany 3. I. G. Farbenindustrie A. G., Leverkusen, Ger. 4. FIAT FR 1313-95

PB 85172s119

U. S. Office of Military Government for Germany.
1-(6'-Chloro-2'-methyl-4'-sulfo phenyl)-5-pyrazolone-3-carboxylic ethyl ester. n.d. 3p Mi $1.25 Ph $1.25
See also BIOS FR 986, Item 22 (PB 77764)
1. Dyes and dyeing—Germany 2. Chloro-methyl-carbethoxy-pyrasol acid 624 (Trade name) 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-119

PB 85172s33

U. S. Office of Military Government for Germany.
Siegle pink G 443 conc. new. n.d. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 33 to PB 85172

1. Dyes and dyeing—Germany 2. Siegle pink G 443 conc. (Trade name) 3. Siegle, G. & Co., G.m.b.H., Stuttgart, Ger. 4. FIAT FR 1313-33

PB 85172s34
U. S. Office of Military Government for Germany.
Siegle red violet C 445 conc. n.d. 1p tables (Text in German) Mi $1.25 Ph $1.25
Supplement 34 to PB 85172
1. Dyes and dyeing—Germany 2. Siegle red violet C 445 conc. (Trade name) 3. Siegle, G. & Co., G.m.b.H., Stuttgart, Ger. 4. FIAT FR 1313-34

PB 85172s35
U. S. Office of Military Government for Germany.
Siegle violet C 447 conc. n.d. 1p tables (Text in German) Mi $1.25 Ph $1.25
Supplement 35 to PB 85172
1. Dyes and dyeing—Germany 2. Siegle violet C 447 conc. (Trade name) 3. Siegle, G. & Co., G.m.b.H., Stuttgart, Ger. 4. FIAT FR 1313-35

PB 85172s106
U. S. Office of Military Government for Germany.
Silica gel for catalyst support, etc. n.d. 5p (Text in French) Mi $1.25 Ph $1.25
Supplement 106 to PB 85172
1. Dyes and dyeing—Germany 2. Catalysts—Preparation—Germany 3. Silica gels—Uses—Germany 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 5. FIAT FR 1313-106

PB 85172s107
U. S. Office of Military Government for Germany.
Silica gel for catalyst support, etc. n.d. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 107 to PB 85172
1. Dyes and dyeing—Germany 2. Catalysts—Preparation 3. Silica gels—Uses 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 5. FIAT FR 1313-107

PB 85172s103
U. S. Office of Military Government for Germany.
6-Bromo-2:3-hydroxy naphthoic acid. Jun 1939. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 103 to PB 85172
1. Dyes and dyeing—Germany 2. Naphthoic acid, 6-Bromo-2:3-hydroxy—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-103

PB 85172s118
U. S. Office of Military Government for Germany.
6-Chloro-2-methyl phenyl hydrazine-4-sulfonic acid. n.d. 4p Mi $1.25 Ph $1.25
Supplement 118 to PB 85172
1. Dyes and dyeing—Germany 2. 4-Sulfonic acid, 6-Chloro-2-methyl phenyl hydrazine—Germany 3. Chlortolylhydrazinsäure (Trade name) 4. FIAT FR 1313-118

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PB 85172s99
U. S. Office of Military Government for Germany.
6-Nitro-2-benzoxazolone. Apr 1947. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 99 to PB 85172
1. Dyes and dyeing—Germany 2. 2-Benzoxazolone-6-nitro—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-99

PB 85172s24
U. S. Office of Military Government for Germany.
Sulfo trimellitic acid. Oct 1938. 2p (Text in German) Mi $1.25 Ph $1.25
Supplement 24 to PB 85172
1. Dyes and dyeing—Germany 2. Trimellitic acid—Germany 3. Sulfo trimellitic acid (Trade name) 4. I. G. Farbenindustrie A. G. 5. FIAT FR 1313-24

PB 85172s111
U. S. Office of Military Government for Germany.
3-Amino-4-methoxy benzyl-3'-carboxy-4'-hydroxy phenyl sulfone. n.d. 3p Mi $1.25 Ph $1.25
Supplement 111 to PB 85172
1. Dyes and dyeing—Germany 2. Phenyl sulfone, 3-Amino-4-methoxy benzyl-3'-carboxy-4'-hydroxy—Germany 3. Aminooxylsulfone (Trade name) 4. FIAT FR 1313-111

PB 85172s100
U. S. Office of Military Government for Germany.
3-Nitro-4-methoxy benzyl chloride. Jun 1947. 1p (Text in German) Mi $1.25 Ph $1.25
Supplement 100 to PB 85172
1. Dyes and dyeing—Germany 2. Toluene, α-Chloro—Derivatives—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-100

PB 85172s110
U. S. Office of Military Government for Germany.
2-Chloro-4-nitrobenzoic acid. n.d. 3p tables Mi $1.25 Ph $1.25
Supplement 110 to PB 85172
1. Dyes and dyeing—Germany 2. Benzoic acid, 4-Nitro-2-chloro—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-110

PB 85172s115
U. S. Office of Military Government for Germany.
2-Chloro-5-amino-4-sulfobenzoic acid. n.d. 3p tables Mi $1.25 Ph $1.25
Supplement 115 to PB 85172
1. Dyes and dyeing—Germany 2. Benzoic acid, 4-Sulfo-5-amino-2-chloro—Germany 3. C A—acid (Trade name) 4. I. G. Farbenindustrie A. G. 5. FIAT FR 1313-115

PB 85172s97
U. S. Office of Military Government for Germany.
2-Chloro-5-amino-4-sulfobenzoic acid. Apr 1947. 1p (Text in German) Mi $1.25 Ph $1.25

Supplement 97 to PB 85172

I. Dyes and dyeing—Germany 2. Benzoic acid, 4-Sulfo-5-amino-2-chloro 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-97

PB 85172s109

U. S. Office of Military Government for Germany.
2-Chloro-5-nitro-4-sulfobenzoic acid. n.d. 3p Mi $1.25 Ph $1.25

Supplement 109 to PB 85172

I. Dyes and dyeing—Germany 2. Benzoic acid, 4-Sulfo-2-chloro-5-nitro—Germany 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. FIAT FR 1313-109

PB 85172s93

U. S. Office of Military Government for Germany.
Use of X-ray methods in the chemical industry on catalysts and organic dyestuffs. n.d. 55p graphs, tables (Text in German) Mi $2.75 Ph $7.50

Supplement 93 to PB 85172

For English translation see PB 85172, Vol. III, p. 412-464

I. Dyes and dyeing—Germany 2. X-ray inspection—Germany 3. Catalysts—X-ray inspection—Germany 4. I. G. Farbenindustrie A. G. 5. FIAT FR 1313-93

Detergents

PB 95000

Samuels, H. and others.
Some notes on I. G. detergents. Jun 1948. 11p tables Mi $1.75 Ph $2.50

I. Detergents—Germany 2. I. G. Farbenindustrie A. G., Höchst, Ger. 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 4. BIOS FR 1778, Item 22

Plastics and Plasticizers

PB 96042

Berbüsse, H.
Steel-wood bonding cements. Oct 1944. 6p graph, tables Mi $1.25 Ph $1.25

I. Aircraft—Bonding—Germany 2. Cements, Bonding—Germany 3. Focke-Wulf Flugzeubau G.m.b.H., Bremen, Ger. 4. Gt. Brit. Ministry of Supply 5. RTP/TIBT, translation 6. Micro GDC 16/427T, translation

PB 96196

Gt. Brit. Ministry of Supply.
The gluing of compressed bakelised material. Feb 1938. 1p Mi $1.25 Ph $1.25

A translation from the German

This report may not reproduce well

I. Varnish cement—Germany 2. Micro GDC 16/491T, translation

PB 96496

I. G. Farbenindustrie A. G.
Anwendungstechnische prufung von as-leim. (Tests of the technical uses of A.S. glue). Jan 1944. 33p diagrs Mi $2.25 Ph $5.00

Legends in German

I. Glue—Tests—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 9/2T, translation

PB 95355

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Igecoll 30 and Igecoll 50 about 30% in solution (originally Kollidon F33 and K46). 1943-1944. 20f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 95355s for abstracts. 2p Mi $1.25 Ph $1.25

I. Adhesives—Germany 2. Kollidon (Trade name) 3. Igecoll (Trade name) 4. Micro BIOS FD 2491/47, Frames 1-15

PB 95346

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Igelit MP 550D—plastic product. 1941. 11f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 95346s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Adhesives—Germany 2. Igelit (Trade name) 3. Micro BIOS FD 2492/47, Frames 1-10

PB 95347

I. G. Farbenindustrie A. G., Schkopau, Ger.
Igelit PCU paste for tubes and foils, and instructions for repairs. 1940. 9f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

I. Igelit PCU (Trade name) 2. Micro BIOS FD 2273/47, Frames 1-8

PB 96855

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
The "impact" moulding process for plastics. 1941-1945. 53f (Text in German) Mi $2.75 Enl Pr $8.75

See PB 96855s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Plastics—Molding, Impact—Germany 2. Micro BIOS FD 1617/48, Frames 1-52

PB 95247

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Manufacture of Lupolene H. 1945. 3f (Text in French) Mi $1.25 Enl Pr $2.50

See PB 95247s for abstracts. 1p. Mi $1.25 Ph $1.25

I. Lupolen (Trade name) 2. Micro BIOS FD 1667/48, Frames 409-411

PB 96561

I. G. Farbenindustrie A. G., Schkopau, Ger.
Plastic products: Desmophen 1100, Desmosit M and Desmosit X. 1942. 9f (Text in German) Mi $1.25 Enl Pr $2.50

See PB 96561s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Desmophen 1100 (Trade name) 2. Desmosit M (Trade name) 3. Desmosit X (Trade name) 4. Micro BIOS FD 2463/47, Frames 1-8

PB 96578

I. G. Farbenindustrie A. G., Schkopau, Ger.

Plastic products: Desmodur R. 1943-1944. 24f (Text in German) Mi $2.00 Enl Pr $5.00

See PB 96578s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Desmodur R (Trade name) 2. Micro BIOS FD 2236/47, Frames 1-11

PB 96571

I. G. Farbenindustrie A. G., Schkopau, Ger.

Plastic products: Paper glues, A, AT, B, C, E, F, G, H. 1941-1943. 13f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 96571s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Plastics 2. Glue—Manufacture 3. Micro BIOS FD 2441/47, Frames 1-12

PB 96852

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Plastic products: Polyamides and mixed polyamides. 1938-1945. 162f (Text in German) Mi $6.25 Enl Pr $22.50

See PB 96852s for abstracts. 3p. Mi $1.25 Ph $1.25

1. Plastics—Production—Germany 2. Polyamides—Production—Germany 3. Polyamides—Mixtures—Germany 4. Micro BIOS FD 967/48, Frames 1-161

PB 96565

I. G. Farbenindustrie A. G., Schkopau, Ger.

Plastic products Desmophen 300, 800, 900, 1100, 1400 and Desmosit C, H, H, O, T (Vulkollan T), TB, TH, M. 1942-1944. 43f (Text in German) Mi $2.50 Enl Pr $7.50

See PB 96565s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Plastics—Manufacture—Germany 2. Desmophen 300 (Trade name) 3. Desmophen 800 (Trade name) 4. Desmophen 900 (Trade name) 5. Desmophen 1100 (Trade name) 6. Desmophen 1400 (Trade name) 7. Desmosit C (Trade name) 8. Desmosit H (Trade name) 9. Desmosit HH (Trade name) 10. Desmosit O (Trade name) 11. Desmosit T (Vulkollan T) (Trade name) 12. Desmosit TB (Trade name) 13. Desmosit TH (Trade name) 14. Desmosit M (Trade name) 15. Micro BIOS FD 2462/47, Frames 1-42

PB 95217

I. G. Farbenindustrie A. G., Schkopau, Ger.

Project for Visol-4 and Visol-6 production in Schkopau. 1943. 14f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 95217s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Ether, Ethyl vinyl—Germany 2. Visol (Trade name) 3. Micro BIOS FD 2176/47, Frames 1-13

PB 96509

Müller, A. and Pressler, H.

Nietverbindungen aus dem kunstharzpressstoff "dynal." (Riveted joints of dynal plastic). Jun 1942. 17p photos, diagrs, tables Mi $1.75 Ph $2.50

Legends in German

1. Dynal—Germany 2. Joints, Riveted—Germany 3. Gt. Brit. Ministry of Supply 4. Micro GDC 16/429T, translation

PB 96519

Nitsche (Herr)

Sitzung der arbeitsgruppe "tropeneignung von kunststoffen" (FDC) am 12.3.1943 in Berlin. (Conference of the research group for tropical suitability of plastics 12.3.1943 in Berlin.) Mar 1943. 2p Mi $1.25 Ph $1.25

1. Plastics—Temperature effects—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 16/429H(a)T, translation

Chemical Engineering and Equipment

Falk, David M. PB 96881

Operational suitability test of type H-1 meter, gas, water vapor analyzing, CO2 refrigerated. Jan 1949. 19p photos Mi $1.75 Ph $2.50

The report covers tests to determine the suitability of the H-1 meter for general USAF use. The meter was designed to test oxygen, nitrogen, carbon dioxide, and other compressed gases for conformance to Army, Navy, and Air Force, specifications with regard to water vapor content. Photographs are included. APGC Proj 34849-5

PB 96767

I. G. Farbenindustrie A. G., Schkopau, Ger.

Damage to rubber-lined equipment in chlorine and aldehyde plant. 1940-1944. 143f (Text in German) Mi $5.75 Enl Pr $20.00

See PB 96767s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Coatings, Rubber— Wear—Germany 2. Aldehydes—Production—Equipment—Germany 3. Chlorine—Production—Equipment—Germany 4. Micro BIOS FD 2069/47, Frames 1-142

PB 96769

I. G. Farbenindustrie A. G., Schkopau, Ger.

Description and cost price calculation relating to salt electrolysis plant for the production of chlorine. 1938-1940. 86f (Text in German) Mi $3.75 Enl Pr $12.50

See PB 96769s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Chlorine—Production—Germany 2. Sodium chloride—Electrolysis—Germany 3. Micro BIOS FD 2063/47, Frames 1-85

Miscellaneous Chemicals

PB 95958

Chemische apparatur. (Chemical apparatus). v. 29, No. 24. 1942.

Chemische technik. (Chemical engineering). v. 15, Nos. 3-4. 1942. v. 16, Nos. 2-26. 1943. v. 17, Nos. 1-6. 1944. v. 18, Nos. 1-4. 1945.

Deutsche patentanmeldungen. (German patent applications) Dec 10, 1942-May 20, 1943.

Dechema-werkstoff-bericht. (Dechema reports on materials). v. 9. 1943. v. 10. 1944.

Chemische industrie. (Chemical industry). v. 65, Nos. 1-52. 1942. v. 66, Nos. 1-12. 1943. 655f (Text in German) Mi $9.00 Enl Pr $85.00

1. Chemistry—Periodicals—Germany 2. Chemical engineering—Periodicals—Germany 3. Chemistry—Patents—Germany 4. Micro FIAT K 52, Frames 2487-5310

PB 96326

Die chemische industrie. Nachrichten ausgabe. (Chemical industry. News edition). v. 66, Nos. 13-52. (Incomplete). Apr-Dec 1943. v. 67. Nos. 1-43. (Incomplete). Jan-Oct 1944.

Die chemische industrie. (Chemical industry). v. 65, Nos. 1-12. Jan-Dec 1942. v. 66, Nos. 1-12. Jan-Dec 1943.

Chemie-Arbeit in werk und labor. (Chemistry-in the plant and laboratory). v. 67, No. 1. 1944. 513f (Text in German) Mi $9.00 Enl Pr $67.50

1. Chemistry—Periodicals—Germany 2. Micro FIAT K 53, Frames 5311-5824

PB 96314

Chemische technik. (Chemical engineering). v. 16, Nos. 10-26. May-Dec 1943.

I. G. Farbenindustrie A. G., Höchst, Ger. German patent applications in the field of chemistry, Dec 10, 1942-May 20, 1943.

Teer und bitumen. (Tar and bitumen). v. 37, Nos. 1-33. 1939. v. 38, Nos. 1-24. 1940. v. 39, Nos. 1-24. 1941. v. 40, Nos. 1-8. 1942. 660f (Text in German) Mi $9.00 Enl Pr $86.25

1. Tar—Periodicals—Germany 2. Bitumen—Periodicals—Germany 3. Chemistry—Patents—Germany 4. Engineering, Chemical—Periodicals—Germany 5. Micro FIAT K 40, Frames 6091-6750

PB 95606

France. Ministere de la Production.

Miscellaneous reports dealing with chemicals. 1937, 1939, 1941-1945. 269f (Text in German) Mi $9.00 Enl Pr $35.00

See PB 95606s for abstracts. 34 p Mi $2.25 Ph 5.00

1. Chemicals—Production—Germany 2. Micro FIAT A 333, Frames 7576-7844

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Notes relating to damage to heat exchangers. 1943. Frames 7576-7599 (Text in German) Enl Pr $5.00

1. Heat exchangers—Damage—Germany 2. Micro FIAT A 333, Frames 7576-7599 3. Micro BIOS FD 21/47, Frames 7576-7599

PB 95606

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Ignition of gas mixtures by friction sparks. 1944. Frames 7600-7609 (Text in German) Enl Pr $2.50

1. Gases—Ignition—Germany 2. Micro FIAT A 333, Frames 7600-7609 3. Micro BIOS FD 23/47, Frames 7600-7609

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Analytische und sprengstofftechnische untersuchungen an acetylensilber. (Research relating to analysis and explosive properties of acetylene silver by Robert Stadler). 1937. Frames 7610-7660 (Text in German) Enl Pr $7.50

1. Silver compounds—Research—Germany 2. Micro FIAT A 333, Frames 7610-7660 3. Micro BIOS FD 43/47, Frames 7610-7660

PB 95606

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Die destillation von cyclohexanone. (Distillation of cyclohexanone), by Dr. Wolf). 1942. Frames 7661-7681 (Text in German) Enl Pr $3.75

1. Cyclohexane—Distillation—Germany 2. Micro FIAT A 333, Frames 7661-7681 3. Micro BIOS FD 329/47, Frames 7661-7681

PB 95606

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Dehydrogenation and air oxidation of cyclohexanol and of methylcyclohexanols, and possibilities of further processing. 1941. Frames 7682-7715 (Text in German) Enl Pr $6.25

1. Cyclohexanol—Dehydrogenation—Germany 2. Cyclohexanol—Oxidation—Germany 3. Cyclohexanol, Methyl—Dehydrogenation—Germany 4. Cyclohexanol, Methyl—Oxidation—Germany 5. Micro FIAT A 333, Frames 7682-7715 6. Micro BIOS FD 330/47, Frames 7682-7715

PB 95606

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Reports and data connected with the production of cyclohexanone. 1941-1943. Frames 7716-7744 (Text in German) Enl Pr $11.25

1. Cycloheranone—Production—Germany 2. Micro FIAT A 333, Frames 7716-7744 3. Micro BIOS FD 338/47, Frames 7716-7744

PB 95606

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Survey of research work in the sphere of cyclohexanol-cycloheranone-adipinic acid up to 1-5-1941, by Dr. Loewenberg. 1941. Frames 7745-7757 (Text in German) Enl Pr $3.75

1. Cyclohexanol—Production—Germany 2. Cyclohexanone—Production—Germany 3. Adipinic acid—Production—Germany 4. Micro FIAT A 333, Frames 7745-7757 5. Micro BIOS FD 339/47, Frames 7745-7757

PB 95606

I. G. Farbenindustrie A. G., Oppau, Ger.

Über eine neue darstellungsmethode von enolalthern (on a new method for the production of Enol ethers), by Dr. Runge. 1942. Frames 7758-7763 (Text in German) Enl Pr $2.50

1. Ethers—Production—Germany 2. Micro FIAT A 333, Frames 7758-7763 3. Micro BIOS FD 348/47, Frames 7758-7763

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

The influence of diffusion on the length of stay in the catalyst chambers (reaction rate) in butinediol hydrogenation. 1944. Frames 7764-7767 (Text in German) Enl Pr $2.50

1. Butynediol—Hydrogenation—Germany 2. Micro FIAT A 333, Frames 7764-7767 3. Micro BIOS FD 3056/46, Frames 7764-7767

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Condensation products of lactams and organic acids, by W. Wolff and E. Eckardt, 1944. Frames 7768-7770 (Text in German) Enl Pr $2.50

1. Lactams—Condensation—Germany 2. Acids, Organic—Condensation—Germany 3. Micro FIAT A 333, Frames 7768-7770 4. Micro BIOS FD 3053/46, Frames 7768-7770

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Report on the reaction of butinediol and propargyl alcohol to alkalis. 1945. Frames 7771-7777 (Text in German) Enl Pr $2.50

1. Butynediol—Reactions—Germany 2. Propargyl alcohol—Germany 3. Micro FIAT A 333, Frames 7771-7777 4. Micro BIOS FD 3066/46, Frames 7771-7777

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PB 956[illegible]

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Bericht über die einwirkung von wassergas auf tetrahydrofuran. (Report on the reaction of water-gas on tetrahydrofuran), by Dr. Pistor. 1944. Frames 7778-7794 (Text in German) Enl Pr $3.75

1. Furan, Tetrahydro—Reactions—Germany 2. Micro FIAT A 333, Frames 7778-7794 3. Micro BIOS FD 3135/46, Frames 7778-7794

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Bericht über die einwirkung von kohlenozyd auf tetrahydrofuran in gegenwart von kobaltkatalysatoren. (Report on the reaction of carbon monoxide on tetrahydrofuran in the presence of cobalt catalysts), by Dr. Pistor. 1944. Frames 7795-7816 (Text in German) Enl Pr $5.00

1. Furan, Tetrahydro—Reactions—Germany 2. Micro FIAT A 333, Frames 7795-7816 3. Micro BIOS FD 3136/46, Frames 7795-7816

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Bericht über die herstellung von adipinsäure aus tetrahydrofuran und kohlenoxyd Teil 3. (Report on the preparation of adipic acid from tetrahydrofuran and carbon monoxide—Part 3), by Dr. Pistor. 1944. Frames 7817-7831 (Text in German) Enl Pr $3.75

1. Adipic acid—Preparation—Germany 2. Micro FIAT A 333, Frames 7817-7831 3. Micro BIOS FD 3137/46, Frames 7817-7831

PB 95606

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Versuche zur herstellung von butadien aus 1.4-butylenglykol. (Experiments on the production of butadiene from 1.4-butylene glycol), by Steinhofer and Daumiller. 1939. Frames 7832-7839 (Text in German) Enl Pr $2.50

1. Butadiene—Production—Germany 2. Micro FIAT A 333, Frames 7832-7839 3. Micro BIOS FD 3158/46, Frames 7832-7839

PB 95606

Deutsche Gold- und Silberscheideanstalt A. G., Frankfurt am Main, Ger.

Methanol synthesis with ternary Zn-Mn-Cr catalysts. 1941. Frames 7840-7844 (Text in German) Enl Pr $2.50

1. Methanol—Synthesis—Germany 2. Micro FIAT A 333, Frames 7840-7844 3. Micro BIOS FD 3437/46, Frames 7840-7844

PB 95603

France. Ministère de la Production.
Miscellaneous reports dealing with chemicals. 1938-1940, 1942-1944. 364f (Text in German) Mi $9.00 Enl Pr $47,50
See PB 95603s for abstracts. 17p. Mi $1.75 Ph $2.50
1. Micro FIAT A 328, Frames 5246-5609

PB 95603

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Reaction of carbon monoxide with olefines and alcohols. 1940. Frames 5246-5332 (Text in German) Enl Pr $12.50
1. Carbon monoxide—Reactions—Germany 2. Olefins—Reactions—Germany 3. Fatty acids—Esters—Yield—Germany 4. Micro FIAT A 328, Frames 5246-5332 5. Micro BIOS FD 3101/46, Frames 5246-5332

PB 95603

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.
Two intermediary fuel products for important chemical purposes. 1939. Frames 5333-5418 (Text in German) Enl Pr $12.50
1. Fuels—Uses—Germany 2. Coal—Uses—Germany 3. Lignite—Uses—Germany 4. Phenol—Preparation—Germany 5. Hydrocarbons—Preparation—Germany 6. Mespasine (Emulsifying agent) 7. Micro FIAT A 328, Frames 5333-5418 8. Micro BIOS FD 3333/46, Frames 5333-5418

PB 95603

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.
Report on the catalytic dehydrogenation of isobutane. 1938. Frames 5419-5462 (Text in German) Enl Pr $8.75
1. Propane, 2-Methyl—Preparation—Germany 2. Micro FIAT A 328, Frames 5419-5462 3. Micro BIOS FD 3353/46, Frames 5416-5462

PB 95603

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Report on investigations on concentration of light olefines from olefine paraffin mixtures by washing. 1939. Frames 5463-5551 (Text in German) Enl Pr $12.50
1. Olefines—Preparation—Germany 2. Micro FIAT A 328, Frames 5463-5551 3. Micro BIOS FD 3301/46, Frames 5463-5551

PB 95603

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.
The isomerisation of n butane with $AlCl_3$. 1943. Frames 5552-5571 (Text in German) Enl Pr $3.75
1. n-Butane—Isomerisation—Germany 2. Micro FIAT A 328, Frames 5552-5571 3. Micro BIOS FD 3388/46, Frames 5552-5571

PB 95603

I. G. Farbenindustrie A. G., Oppau, Ger.
On the production of petrol with high anti-knock qualities, by alkylation of isobutane with butene-1. 1942. Frames 5572-5588 (Text in German) Enl Pr $3.75
1. Fuels, Anti-knock—Production—Germany 2. Micro FIAT A 328, Frames 5572-5588 3. Micro BIOS FD 3190/46, Frames 5572-5588

PB 95603

Ruhrgas, A. G., Essen, Ger.
The enrichment of coal gas by methanisation. 1944. Frames 5589-5609 (Text in German) Enl Pr $3.75
1. Coal gas—Enrichment—Germany 2. Micro FIAT A 328, Frames 5589-5609 3. Micro BIOS FD 3466/46, Frames 5589-5609

PB 95609

France. Ministère de la Production.
Miscellaneous reports dealing with chemicals. 1941-1946. 300f (Text in German or French) Mi $9.00 Enl Pr $38.75
See PB 95609s for abstracts. 15p. Mi $1.75 Ph $2.50
1. Chemicals—Research—Germany 2. Micro FIAT A 334, Frames 7845-8145

PB 95609

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Measuring the viscosity of "Solvatized" colloidal solutions (Solvatisierte sole). 1941. Frames 7845-7871 (Text in German) Enl Pr $5.00
1. Viscosity—Measurements—Germany 2. Micro FIAT A 334, Frames 7845-7871 3. Micro BIOS FD 284/47, Frames 7845-7871

PB 95609

I. G. Farbenindustrie A. G., Wolfen, Ger.
Production of Perlon L bristles. 1946. Frames 7872-7874 (Text in German) Enl Pr $2.50
1. Perlon L (Trade name) 2. Micro FIAT A 334, Frames 7872-7874 3. Micro BIOS FD 285/47, Frames 7872-7874

PB 95609

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.
Four research reports on "Mesamoll", softener and plasticizer. 1941-1943. Frames 7875-7937 (Text in German) Enl Pr $10.00
1. Mesamoll (Trade name) 2. Micro FIAT A 334, Frames 7875-7937 3. Micro BIOS FD 926/47, Frames 7875-7937

PB 95609

I. G. Farbenindustrie A. G., Bitterfeld, Ger.
Processing of phosphates. 1945. Frames 7938-7959 (Text in German) Enl Pr $5.00

1. Phosphates—Production—Germany 2. Micro FIAT A 334, Frames 7938-7959 3. Micro BIOS FD 3207/46, Frames 7938-7959

PB 95609

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Polymerization of ethylene. 1946. Frames 7960-7990 (Text in German of French) Enl Pr $5.00

1. Ethylene—Polymerization—Germany 2. Micro FIAT A 334, Frames 7960-7990 3. Micro BIOS FD 3410/46, Frames 7960-7990

PB 95609

I. G. Farbenindustrie A. G., Höchst, Ger.
Sixteen research reports relating to synthetic rubber and plastics. 1941-1944. Frames 7991-8145 (Text in German) Enl Pr $21.25

1. Plastics—Research—Germany 2. Rubber, Synthetic—Research—Germany 3. Micro FIAT A 334, Frames 7991-8145 4. Micro BIOS FD 3446/46, Frames 7991-8145

PB 96550

Hoog, H. and others.
Additional information on various catalytic processes in western Germany (British Zone). 1. n.d. 61p diagrs (fold diagr), table (Text in German or English). Mi $3.00 Ph $8.75
Legends in German and English

1. Catalysis—Germany 2. Catalysts, Hydrogenation 3. Catalysts, Oxygen 4. Netherlands Military Mission. Technical Research 5. BIOS M 112

PB 95121

I. G. Farbenindustrie A. G., Oppau, Ger.
Manufacture and application of silica gel. 1938-1940. 30f (Text in German) Mi $2.00 Enl Pr $5.00
See PB 95121s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Silica gel—Germany 2. Micro BIOS FD 4035/47, Frames 1-29 3. Micro MOFP/Bag 2171, Frames 1-29

PB 95234

I. G. Farbenindustrie A. G., Oppau, Ger.
Oxidation of paraffins (fatty acids). 1945. 31f (Text in French) Mi $2.25 Enl Pr $6.25
See PB 95234s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Paraffins—Oxidation—Germany 2. Micro BIOS FD 1670/48, Frames 420-450

PB 96768

I. G. Farbenindustrie A. G., Schkopau, Ger.
Correspondence on a shortage of potassium persulphate. 1936-1944. 54f (Text in German) Mi $2.75 Enl Pr $8.75
See PB 96768s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Potassium peroxydisulfate—Germany 2. Micro BIOS FD 2072/47, Frames 1-53

PB 96778

I. G. Farbenindustrie A. G., Schkopau, Ger.
Electrical equipment of the chlorine electrolysis plant. 1939-1944. 73f (Text in German) Mi $3.50 Enl Pr $11.25
See PB 96778s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Chlorine—Electrolysis—Germany 2. Electrolysis—Equipment—Germany 3. Micro BIOS FD 2068/47, Frames 1-72

PB 95148

I. G. Farbenindustrie A. G., Schkopau, Ger.
Monthly production reports on the ethylene hydrogenation. 1942-1944. 120f (Text in German) Mi $4.75 Enl Pr $16.25
See PB 95148s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Ethylene—Hydrogenation—Germany 2. Micro BIOS FD 2145/47, Frames 1-119

PB 96777

I. G. Farbenindustrie A. G., Schkopau, Ger.
Notes on operation of styrene plant. 1939-1943. 97f (Text in German) Mi $4.25 Enl Pr $13.75
See PB 96777s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Styrene—Production—Germany 2. Micro BIOS FD 2169/47, Frames 1-96

PB 96770

I. G. Farbenindustrie A. G., Schkopau, Ger.
Pooling of technical experience on chlorine production. 1938-1943. 106f (Text in German) Mi $4.50 Enl Pr $15.00
See PB 96770s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Chlorine—Production—Germany 2. Micro BIOS FD 2075/47, Frames 1-105

PB 96573

I. G. Farbenindustrie A. G., Schkopau, Ger.
Production of toluol and styrene. 1939-1943. 26f (Text in German) , Mi $2.00 Enl Pr $5.00
See PB 96573s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Toluene—Production—Germany 2. Styrene—Production—Germany 3. Micro BIOS FD 2168/47, Frames 1-25

PB 96576

I. G. Farbenindustrie A. G., Schkopau, Ger.
Structure of mixed polymers. 1940-1942. 25f (Text in German) Mi $2.00 Enl Pr $5.00
See PB 96576s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Polymers—Structure 2. Micro BIOS FD 2248/47, Frames 1-24

PB 96538

Neill, J.

The "sodingen" process for the recovery of ethylene from coke oven gas. May 1948. 17p diagrs Mi $1.75 Ph $2.50

1. Ethylene—Recovery from coke oven gas—Germany 2. BIOS FR 1816, Item 22

PB 96352

Netherlands Military Mission. Technical Research.

Dutch report on visit to I.G. Farben, Ludwigshafen and Oppau and Raschig Werke Mundesheim: Miscellaneous organic chemicals and instrumentation. n.d. 142p diagrs, drawings (Text in German or English) Mi $5.75 Ph $18.75

Legends in German or English

1. Formaldehyde—Preparation—Germany 2. Acetylene chemistry—Preparation—Germany 3. Ethylene chemistry—Germany 4. Methane—Synthesis—Germany 5. Anilene—Germany 3. Acetone—Germany 7. Raschig, F., G.m.b.H., Mundesheim, Ger. 8. I. G. Farbenindustrie A. G., Oppau, Ger. 9. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 10. BIOS M 104

PB 94716

U. S. Air Force and U. S. Navy Dept.

Methyl bromide: Odorized (for fire extinguishing purposes). Air Force-Navy aeronautical specification. Sep 1948. 9p table Mi $1.25 Ph $1.25

1. Methane, Bromo—Specification 2. AN-M-41

PB 96305

Wöhler-Instituts, Braunschweig. Mitteilungen. (Wöhler Institute, Braunschweig. Reports). 1940, 1941, 1943.

Chemiker zeitung. (Chemists journal). v. 65, Nos. 1-100. 1941. v. 67, Nos. 1-24. 1943.

Chemisch technische übersicht. (Chemical technical survey). 1941. 1943. 697f (Text in German) Mi $9.00 Enl Pr $90.00

1. Chemistry—Periodicals—Germany 2. Materials—Testing—Germany 3. Micro FIAT K 50, Frames 3446-4143

ELECTRICAL MACHINERY, EQUIPMENT AND SUPPLIES

Communication Equipment

PB 73731s2

Siemens & Halske A. G., Berlin.

X-ray impulse tube: Teleprinter, helischreiber, telephony, and telegraphy systems: Cine cameras and projectors: and use of ultrasonic oscillations for tinning and emulsifying. 1935-1946. 5p Mi $1.25 Ph $1.25

Supplement 2 to PB 73731

1. Micro FIAT GG 15, Frames 1207-1849, abstracts

—62288

Electronics

PB 96663

Bennett, P. and Robinson, E.F.V.

Miniaturizing techniques as exemplified in the design of a compact 300-volt supply. Nov 1948. 23p photos, drawings (fold drawing), diagrs Mi $2.00 Ph $3.75

A compact regulated power supply employing miniature tubes is described. The unit illustrates some techniques by which the over-all dimensions of electronic apparatus may be reduced. The type of construction used results in a compact arrangement of components, while permitting easy access for servicing. Standard components are used. By the use of special components, especially transformers, a further reduction of size could be achieved. The present unit is only 9" x 7 1/2" x 7" and weighs 21 1/4 lb. The circuit used is similar to that described in more detail in Report No. ERA-156, entitled, "Laboratory Manual for General Purpose D-C Supplies". In addition to the stabilized output, which may be varied from +250 to +300 volts as a load of about 80 ma, a negative output of 150 volts is provided at 20 ma, regulated by means of a VR tube. The filament supply of 6.3 volts, 2-c, at 3.5 amperes, for external use, may be operated with grounded centre tap, or either side may be grounded to the chassis. No provision is made for operating with the filament supply floating. NRCC 1853.

PB 95030

Combined Intelligence Objectives Sub-Committee and Enemy Equipment Intelligence Service.

German infrared driving and fire control equipment, Part I and II. Jan 1948. 25p photos, diagrs Mi $2.00 Ph $3.75

1. Fire control equipment—Germany 2. Infrared equipment—Germany 3. BIOS M 66

PB 96874

Goubau, George

Design data and equivalent circuits for cavity systems. Dec 1948. 24p diagrs Mi $2.00 Ph $3.75

This report presents design data and equivalent circuits for microwave systems consisting of cavities coupled together, to waveguides, or to coaxial cables. The theory from which these data are obtained assumes that the dimensions of the coupling elements (holes, loops, rods, etc.) are small compared with the wavelength. Under this condition each cavity and each coupling element can be described by lumped constants which are independent of the order in which the elements are arranged. These constants can be represented by the usual lumped network elements such as coils, condensers, transformers, etc. The report gives no information about the fundamentals of the thory. SCEL TM M 1160.

Miscellaneous

PB 70365s

Dresden, Ger. Technische Hochschule.

Electro-technical research work undertaken for the German Army and Navy. n.d. 2p Mi $1.25 Ph $1.25

Supplement to PB 70365

I. Micro FIAT AA 231, Frames 1-72, abstracts

FUELS AND LUBRICANTS

PB 96871

Daniels, A. W.

Handling the waste products of combustion in German brown-coal fired electric power stations. n.d. 15p diagrs Mi $1.75 Ph $2.50

This report covers an investigation to observe the handling technique with the waste products of combustion at the following brown-coal fired electric power stations in the Cologne area: a. Zukumft Eschweiler; b. Fortuna 2, Quadrath; c. Brickettfabrik Wachtberg; d. Goldenberg Power Station, Brühl; e. Roddergrube, Brickettfabrik Brühl; and f. Rhein-Benzin, Wesseling. With regard to the methods of handling and disposing of the ash and dust it was thought that sufficient information was gathered to enable this field to the approached with confidence by firms normally specializing in the hydraulic and pneumatic handling of ash and flue dust from black-coal fired boiler plants. Drawing. BIOS FR 1828, Item 33.

PB 95629

France. Ministère de la Production.

Miscellaneous reports dealing mainly with coal hydrogenation and petroleum. 1947. 603f (Text in German) Mi $9.00 Enl Pr $85.00

Frames 3295-3560 will not reproduce well

Frames 3563-3565 are missing

No abstracts available

I. Coal—Hydrogenation—Germany 2. Petroleum—Germany 3. Reppe synthesis 4. Carbon monoxide—Germany 5. Fischer-Tropich process 6. Carboraffin (Activated carbon)—Germany 7. Supersorbon (Activated carbon)—Germany 8. Benzarbon (Activated carbon)—Germany 9. Carbon, Activated—Germany 10. Gas—Purification—Germany 11. Potassium sulfocarbonate—Germany 12. Rührchemie A. G., Oberhausen, Ger. 13. Lurgi Gesellschaft für Wärmetechnik m.b.H., Frankfurt am Main, Ger. 14. I. G. Farbenindustrie A. G., Leverkusen, Ger. 15. Micro FIAT A 346, Frames 3208-3808

PB 95628

France. Ministère de la Production.

Miscellaneous reports dealing mainly with coal hydrogenation and petroleum distillation. 1943-1947. 205f drawings (Text in German and English) Mi $7.50 Enl Pr $27.50

Frames 3850-3896 will not reproduce well

Frames 3817-3819 are English translation of frames 3809-3816

Frames 3940A-3940D are English translations of frames 3938-3940

Frames 3992-4008 are English translations of frames 3970-3991

No abstracts available

Frames 3931-3937 are in German and English

I. Coal—Hydrogenation—Germany 2. Petroleum—Distillation—Germany 3. Coal tar products—Preparation—Germany 4. Gases—Purification—Germany 5. Resins—Production—Germany 6. Emekal 399 (Resin) 7. Fuels, Aviation—Production—Germany 8. Rütgerswerke A. G., Duisburg, Ger. 9. Chemische Werke Hüls G.m.b.H., Marl, Ger. 10. Micro FIAT A 347, Frames 3809-4008

PB 96774

I. G. Farbenindustrie A. G., Schkopau, Ger.

Calcium carbide dry gasification plant. Calcium carbide and lime conveyor system. 1938-1943. 28f (Text in German) Mi $2.00 Enl Pr $5.00

See PB 96774s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Calcium carbide—Germany 2. Acetylene—Production—Germany 3. Micro BIOS FD 2050/47, Frames 1-27

PB 96771

I. G. Farbenindustrie A. G., Schkopau, Ger.

Description of acetylene plant and works regulations. 1941-1944. 60f (Text in German) Mi $2.75 Enl Pr $8.75

See PB 96771s for abstracts. 1p. Mi $1.25 Ph $1.25

I. Acetylene—Production—Germany 2. Micro BIOS FD 2048/47, Frames 1-59

PB 96773

I. G. Farbenindustrie A. G., Schkopau, Ger.

Production of hexachloroethane. 1939-1941. 12f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 96773s for abstracts. 1p. Mi $1.25 Ph $1.25

I. Ethane, Hexachloro—Production—Germany 2. Micro BIOS FD 2668/47, Frames 1-11

PB 96806

Shaw, Milton C. and Nussdorfer, Theodore

A visual and photographic study of cylinder lubrication. 1946. 20p photos, diagrs Mi $1.75 Ph $2.50

A V-type engine provided with a glass cylinder was used to study visually the lubrication characteristics of an aircraft-type piston. Photographs and data were obtained with the engine motored at engine speeds up to 1000 rpm and constant cylinder-head pressures of 0 and 50 pounds per square inch. A study was made of the orientation of the piston under various operating conditions, which indicated that the piston was inclined with the crown nearest the major-thrust cylinder face throughout the

The greater part of the cycle. The piston moved laterally in the cylinder under the influence of piston side thrust. The data and the photographs indicate that the lubrication of the piston assembly, under the conditions of these experiments, is hydrodynamic in nature for at least part of the stroke. Definitely wedge-shaped oil films were photographed and correlated with piston-orientation data. The amount of lubricant present on the piston skirt varied with the relative angular positions of piston rings and with the lateral motion of the piston because of load. Rate and direction of piston-ring rotation varied with cylinder-head pressure and engine speed. Piston rings were observed to rotate as rapidly as 1 rpm at an engine speed of 1000 rpm. Little oil was present on the piston skirt when the cylinder was operated under load, and the oil film on the face of a piston ring was estimated to be 0.0001 inch thick or less. In general, much less oil was present on the upper side of the inclined piston than on the lower side. In this case, the upper side was the major-thrust face. NACA 850.

INSTRUMENTS

PB 97203

Bady, Isidore

Equipment to measure the temperature coefficient of capacity. Jan 1949. 26p photos, drawings, tables Mi $2.00 Ph $3.75

1. Equipment, Communication 2. Instruments—Temperature effects 3. SCEL TM M-1165

PB 95645

Pennsylvania. University. Moore School of Electrical Engineering.

Theory and techniques for design of electronic digital computers, Vol. III, Lectures 22-33. Jun 1948. 157p diagrs, graphs, tables Mi $6.00 Ph $20.00

1. Computers, Electronic

PB 95646

Pennsylvania. University. Moore School of Electrical Engineering.

Theory and techniques for design of electronic digital computers, Vol. IV, Lectures 34-48. Jun 1948. 159p diagrs, graphs, tables Mi $6.00 Ph $20.00

1. Computers, Electronic

PB 92532

Physikalisch-Technisches Entwickelungslaboratorium Dr. Rohde and Dr. Schwarz, Munich, Ger.

Quartz crystal clocks. 1940, 1946. 13f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 92532s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Clocks, Crystal—Germany 2. Micro BIOS FD 1299/47, Frames 1-12 3. BIOS FR 1316 LD, Frames 1-12

PB 92477r

U. S. Aeronautical Board.

Thermocouple-chromel-alumel, range 0 to +1000 degrees. C. Dec 1948. 1p drawing Mi $1.25 Ph $1.25

Revision of PB 92477

PB 93316r2

U. S. Aeronautical Board.

Thermocouple leads-chromel and alumel, installation of. Dec 1948. 1p drawing Mi $1.25 Ph $1.25

Revision 2 of PB 93316

PB 93604r

U. S. Aeronautical Board.

Thermocouple parallel arrangement-chromel and alumel, installation of. Dec 1948. 1p drawing Mi $1.25 Ph $1.25

Revision of PB 93604

PB 94710

U. S. Air Force and U. S. Navy Dept.

Adapter: Air pressure gage. Air Force-Navy aeronautical standard. Sep 1948. 1p drawings Mi $1.25 Ph $1.25

1. Pressure, Air—Measurements 2. Adapters, Air pressure

PB 26042r2

U. S. Air Force and U. S. Navy Dept.

CAP: High pressure air valve. Air Force-Navy aeronautical standard. Oct 1948. 1p drawings Mi $1.25 Ph $1.25

Revision 2 of PB 26042

PB 46818r2

U. S. Air Force.

Radio compass quadrantal error correction. Jul 1948. 7p drawing, tables Mi $1.25 Ph $1.25

1. AAF TO 01-1-152, rev. 2

PB 21784r

U. S. Air Force and U. S. Navy Dept.

Specification: valves: hydraulic shuttle. Nov 1948. 18p tables, drawing Mi $1.75 Ph $2.50

Revision of PB 21784

PB 94702

U. S. Air Force and U. S. Navy Dept.

Valve: Air high pressure 3/4 HEX. Air Force-Navy aeronautical standard. Sep 1948. 1p drawings Mi $1.25 Ph $1.25

1. Valves, High pressure

PB 26561r2

U. S. Air Force and U. S. Navy Dept.

Valve—high pressure oxygen check (Style B). Nov 1948. 1p drawing Mi $1.25 Ph $1.25

1. Valves—Design 2. Valves, Check 3. Valves, Oxygen

PB 26597r2

U. S. Air Force and U. S. Navy Dept.
Valve: Hydraulic bleeder. Air Force-Navy aeronautical standard. Aug 1948. 1p drawing, table Mi $1.25 Ph $1.25

PB 21782a

U. S. Air Force and U. S. Navy Dept.
Valve: Relief, hydraulic pressure. Air Force-Navy aeronautical specification. Sep 1948. 1p Mi $1.25 Ph $1.25

PB 21775a2

U. S. Air Force and U. S. Navy Dept.
Valves: Air vacuum regulating (throttling). Air Force-Navy aeronautical specification. Oct 1948. 1p Mi $1.25 Ph $1.25
Amendment 2 to PB 21775

PB 40139r

U. S. Army Air Forces.
Set: Maintenance, field instrument. Sep 1947. 3p tables Mi $1.25 Ph $1.25

PB 87139

U. S. Army Air Forces.
Set: Meter and instrument, equipment laboratory. Feb 1947. 11p tables Mi $1.75 Ph $2.50
1. Meters—Testing equipment 2. Laboratories, Meter and instrument 3. AAF TO 00-30-755

LUMBER AND WOOD PRODUCTS

PB 96682

U. S. Housing and Home Finance Agency.
Properties of experimental wood-base house flooring materials. Including a tentative test procedure for flooring. Technical paper number 11. Nov 1948. 18p photos Mi $1.75 Ph $2.50
also Available from U.S. Housing and Home Finance Agency, Washington, D. C.

Three types of wood-base materials proposed by manufacturers for use as house flooring were tested to compare their physical and mechanical properties with those of conventional wood flooring. One material submitted consisted of a grooved fiberboard base inset with thin hardwood strips glued in place (parquetry flooring); the second and third were wood-waste materials compressed to high density and bonded with phenol resin. The materials were tested for such mechanical properties as hardness, brittleness, resistance to crushing under heavy rolling loads and highly concentrated loads (traffic and indentation), and also surface wear when abraded by various means. Physical tests included accelerated aging, water absorption, linear expansion, surface wetting, shrinkage, and water and turpentine permeability. None of the materials were given all of the tests. The densified wood-waste materials withstood such mechanical tests as the traffic test, heavy rolling load, and indentation in general as well as did solid wood hardwood flooring materials. The parquetry flooring of wood and fiberboard, several designs of which were tested, exhibited points of weakness were the hardwood inset strips adjoined the surface of the fiberboard when tested under heavy rolling and highly concentrated loads. In abrasion tests the densified materials and parquetry flooring generally were inferior to the solid wood flooring. The most highly densified material tested did not withstand the shattering effects of the drop test as well as did solid wood; the other materials were not tested in this manner. In the tests of physical properties, all three materials tested showed less linear expansion than wood despite their high rate of moisture absorption. The densified material given the accelerated aging test designed to indicate resistance to long-time exposure to mild dampness, showed little adverse effect from this exposure. The parquetry flooring of wood and fiberboard and the one type of densified flooring tested withstood the effects of surface wetting better than did solid wood flooring. A densified material was readily penetrated by both water and turpentine in permeability tests. A shrinkage test given the parquetry flooring demonstrated the need of installing the wood strips at a low moisture content if shrinkage damage during service is to be avoided. HHFA TP 11

PB 96680

U. S. Housing and Home finance Agency.
Some properties of paper-overlaid veneer and plywood. Technical paper number 9. May 1948. 26p photos, graphs, diagrs Mi $2.00 Ph $3.75
also Available from U. S. Housing and Home Finance Agency, Washington, D. C.

Paper overlays impregnated with phenolic resin, which are coming into use to mask defects in veneer and plywood, were found by test to improve bending strength, stiffness, abrasion resistance, and dimensional stability of veneer. The effects of resin treatment were particularly apparent in all tests when the specimens were in a water-soaked condition. Resin treatment contributed greatly to reduction in the rate at which water vapor passes through the overlaid veneer. Veneer overlaid with paper at 10 percent resin content had good abrasion resistance. For other properties, 15 percent resin content gave optimum improvement. Improvement in most properties was also obtained by increasing the thickness of the overlay, either by using a thicker treated paper or by applying more than one overlay sheet to the veneer. The bending strength and stiffness of water-soaked veneers overlaid with paper containing 15 percent of resin often almost equalled the bending strength and stiffness of veneer overlaid with untreated paper in the dry condition. Untreated paper overlays were quickly worn through by the abrading machine when water-soaked; overlay paper treated with 10 percent of

resin withstood roughly 50 times as much abrasive action. A two-sheet overlay containing 15 percent of resin was shown to be very nearly as resistant to passage of water vapor as a good asphalt-laminated, sisal-reinforced kraft building paper. A single sheet of 9-mil overlay paper at 15 percent resin content reduced the cross-grain swelling of Douglas-fir veneer by 75 percent. Preliminary tests comparing veneer overlaid with paper at 15 percent resin content with plywood indicated that the overlaid veneer swells considerably more across the grain than does plywood either along or across the grain. The same tests indicated that, when used as facings for sandwich panels with honeycomb paper cores, the swelling characteristics of the facings control dimensional change of the panels. HHFA TP9

MACHINERY

PB 96669

Bell, Alexander and others.

German power press industry. 1948. 66p Mi $3.00 Ph $8.75

1. Presses, Power—Germany 2. Tool industry—Germany 3. Automotive industry—Germany 4. Stamping, Metal—Germany 5. BIOS FR 1826, Item 31

PB 53110s

Gesellschaft für Lindes Eismaschinen A. G., Höllriegelskreuth, Ger.

Plant and machinery for welding, generation of oxygen, nitrogen, and hydrogen: Plant for the separation, decomposition and liquefaction of gases. 1936-1946. 3p Mi $1.25 Ph $1.25

Supplement to PB 53110

1. Micro FIAT E 37, Frames 4-724, abstract

PB 96646

Ivitsky, A. V.

Pressure dyeing. 1947. 66p photos, drawings Mi $3.00 Ph $8.75

1. Pressure machines—Dyes—Germany 2. BIOS FR 1806, Item 31

PB 96722

Kohl, Robert C. and others.

Effects of partial admission on performance of a gas turbine. Feb 1949. 76p photos, charts, drawings, table Mi $3.50 Ph $10.00

In successive studies, a representative single-stage full-admission gas turbine was operated with full and 120° peripheral admission, and the turbine performances at these operating conditions are compared. The significant turbine losses are discussed and methods for quantitatively estimating similar losses for any axial-flow turbine are presented. In addition, estimates of power output and efficiency at any degree of admission may be obtained by the means shown. NACA TN 1807

—82288

PB 70209s

Kugelfischer Georg, Schaefer A. G., Schweinfurt, Ger.

Ball and roller bearing manufacture. 1941-1945. 3p Mi $1.25 Ph $1.25

Supplement to PB 70209

1. Micro FIAT K 17, Frames 1-350, abstract

PB 96880

LaValle, Vincent L. and Huppert, Merle C.

Effects of several design variables on turbine-wheel weight. Feb 1949. 24p Mi $2.00 Ph $3.75

An analysis is presented to show the effects of blading aspect ratio and solidity, the ratio of centrifugal stress at the blade roots to that in the disk (stress ratio), and the ratio of wheel diameter at the blade root to wheel diameter at the blade tip (diameter ratio) on turbine-wheel weight for a wheel model based on the de Laval equation for a disk of uniform strength. Equations are developed for the calculation of the weights of the disk, the rim, and the blades using the preceding variables. Calculated wheel weights agreed satisfactorily with the actual weights of some current wheels. NACA TN 1814

PB 96845

Radium Elektrizitätsgesellschaft, Wipperfürth, Ger.

Cutting machine for single coil filament, connected with the manufacture of electric lamps. 1946. 60f (Text in German) Mi $2.75 Enl Pr $8.75

See also BIOS FD 1763 (PB 95309)

See PB 96845 for abstracts. 1p. Mi $1.25 Ph $1.25

1. Machines, Cutting 2. Lamps—Machinery—Germany 3. Micro BIOS FD 2367/48, Frames 1-59

PB 96846

Schloemann, A. G., Düsseldorf, Ger.

Rolling mill plant drawings. 1938-1943. 96f (Text in German) Mi $4.25 Enl Pr $13.75

See PB 96846s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Rolling mills—Plant layout—Germany 2. Micro BIOS FD 5268/47, Frames 1-95

PB 95012

U. S. Bureau of Aeronautics.

Specifications: Grinder, surface, motor driven. Aug 1948. 3p table Mi $1.25 Ph $1.25

1. Grinding machines—Standards

PB 95013

U. S. Bureau of Aeronautics.

Specifications: Lathes, turret, motor driven. Aug 1948. 4p Mi $1.25 Ph $1.25

1. Lathes, Turret

PB 95014

U. S. Bureau of Aeromautics.

Specifications: Screw-machine, automatic, motor driven (high speed). Aug 1948. 3p Mi $1.25 Ph $1.25

1. Machines—Screw cutting

PB 95309

Wineman, D.

Lamp machinery design and construction in Germany. Aug 1948. 16p Mi $1.75 Ph $2.50

1. Lamps—Machinery—Germany 2. Radium-Elektrizitäts-Gesellschaft, Wipperfürth, Ger. 3. Wolfram A. G., Augsburg, Ger. 4. BIOS FR 1763, Item 31

PB 96733

Wu, Chung-Hua, and Wolfenstein, Lincoln.

Application of radial-equilibrium condition to axial-flow compressor and turbine design. Jan 1949. 101p diagrs Mi $4.50 Ph $13.75

Basic general equations governing the three-dimensional motion of gas through a turbomachine are given in terms of velocity components, total enthalpy, and entropy. These equations are used to determine the radial motion of gas through an axial-flow turbomachine and the corresponding effect on the radial variations of the gas state between successive blade rows in the case of steady axially symmetrical flow. The maximum compatible number of the radial variations of the gas properties between successive blade rows that a designer is free to specify and the possible types obtained by different ways of using up these degrees of freedom are discussed. NACA TN 1795

PB 95919

Zeitschrift für die kältetechnik. (Journal for the refrigeration industry). v. 47, Nos. 11, p. 170-179-12. 1940. v. 48, Nos. 1-12. 1941. v. 49, Nos. 1-12. 1942. v. 50, Nos. 1-12. 1943. v. 51, Nos. 1-10. 1944. Supp. to Nos. 8-10. 1944. 532f (Text in German) Mi $9.00 Enl Pr $70.00

1. Refrigeration—Periodicals—Germany 2. Micro FIAT E 96, Frames 6124-6665

METALS AND METAL PRODUCTS

PB 95487

Aachen. Technische Hochschule.

Superfinish honing: Equipment and tests. 1942. 26f (Text in German) Mi $2.00 Enl Pr $5.00

See PB 95487s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Honing—Germany 2. Micro BIOS FD 4191/47, Frames 1-24 3. Micro BIOS DOC 1732/3034(20), Frames 1-24 4. BIOS FR 1519 LD, Frames 1-24

—62288

PB 93010

Bardenheuer, F.

Improvement of Bessemer and basic steel. May 1945. 3f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

1. Steel, Bessemer—Germany 2. Steel—Production—Germany 3. Micro BIOS FD 689/48, Frames 1-3

PB 93009

Bardenheuer, P.

Production of soft iron and soft iron guide rings. May 1945. 2f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

1. Soft iron—Production—Germany 2. Guide rings 3. Micro BIOS FD 688/48, Frames 1-2

PB 93007

Blasberg, Friedrich, Electrochemische Fabrik, Solingen, Ger.

Hard chromium plating of aluminum and its alloys. n.d. 34f (Text in German) Mi $2.25 Enl Pr $6.25

No abstract available

1. Plating, Chromium—Germany 2. Aluminum—Plating—Germany 3. Aluminum alloy—Plating—Germany 4. Micro BIOS FD 4979/47, Frames not numbered correctly

PB 22902

Bray, John L. and others.

Production of a lead coated steel as substitute for tin plate and terne plate: Progress reports, Dec 1, 1942—Sep 1, 1943. Final report, Dec 31, 1943, Apr 1943—May 1944. 22p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $2.00 (Bib. v. 2, p. 122)

1. Lead coating 2. Steel, Lead coated 3. WMC W-37

PB 96781

Cross, Howard C. and Freeman, J. W.

Office of naval research and NACA metallurgical investigation of a large forged disc of S-816 alloy. Feb 1949. 40p photos, graphs, tables Mi $2.25 Ph $5.00

Properties of large discs of S-816 alloy have been determined for both the as-forged and aged condition and the heat-treated and aged condition by means of stress-rupture and creep tests for time periods up to about 2000 hours at room temperature, 1200°, 1350°, and 1500° F. Short-time tensile test, impact test, and time-deformation characteristics are included. NACA TN 1765

PB 39358s

Deutsche Gold- und Silberscheideanstalt, Frankfurt am Main, Ger.

Degussa metal reports scientific and technical publications by the metal department. Feb 1946. 2p (Text in German and English) Mi $1.25 Ph $1.25

Supplement I to PB 39358

This report may not reproduce well

I. Joint Intelligence Objectives Agency 2. Micro FIAT MM 126, Index

PB 95242

Deutsche Gold- und Silberscheideanstalt, Rheinfelden, Ger.

Manufacture of electrolytic iron powder. n.d. 3f (Text in French) Mi $1.25 Enl Pr $2.50

See PB 95442s for abstracts. 1p. Mi $1.25 Ph $1.25

I. Iron powders—Manufacture—Germany 2. Micro BIOS FD 1671/48, Frames 452-453

PB 73716t5

Deutsche Gold- und Silberscheideanstalt, Frankfurt am Main, Ger.

Process for producing beryllium-aluminum alloys. Jun 1948. 15p drawing Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $16.50

I. Beryllium-aluminum alloy 2. Micro FIAT M 40, Frames 279-287, trans.

PB 95243

Deutsche Gold- und Silberscheideanstalt, Rheinfelden, Ger.

Production of lithium metal. 1945. 5f (Text in French) Mi $1.25 Enl Pr $2.50

See PB 95243s for abstracts. 1p. Mi $1.25 Ph $1.25

I. Lithium—Germany 2. Micro BIOS FD 1668/48, Frames 412-416

PB 93011

Fischer, W. and Heyes, J.

Transformation of phosphorous alloys by means of alkaline earth metals and the production of iron powders. May 1945. 3f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

I. Powder metallurgy—Germany 2. Iron powders—Germany 3. Micro BIOS FD 691/48, Frames 1-2

PB 95612

France. Ministère de la Production.

Miscellaneous reports dealing mainly with metals and minerals. 1929-1946. 381f (Text in German or English) Mi $9.00 Enl Pr $50.00

See PB 95612s for abstracts. 33p. Mi $2.25 Ph $5.00

I. Metallurgy—Germany 2. Minerals—Research—Germany 3. Micro FIAT A 350, Frames 4345-4726

—82288

PB 95612

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Merseburg, Ger.

Preparation of lube oil from hydrogenation products by thermal cracking under pressure, and polymerisation of the cracked products. 1940. Frames 4345-4376 (Text in German) Enl Pr $6.25

I. Lubricating oils—Preparation—Germany 2. Micro FIAT A 350, Frames 4345-4376 3. Micro BIOS FD 3399/46, Frames 4345-4376

PB 95612

I. G. Farbenindustrie A. G., Leuna, Ger.

Reports on Winkler generators. 1929-1935. Frames 4376A-4412 (Text in German) Enl Pr $6.25

I. Generators, Water gas—Germany 2. Water gas—Production equipment—Germany 3. Winkler gas generators—Germany 4. Micro FIAT A 350, Frames 4376A-4412 5. Micro BIOS FD 3362/46, Frames 4376A-4412

PB 95612

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Electrode material for the manufacture of pure aluminium. 1942. Frames 4413-4415 (Text in German) Enl Pr $2.50

I. Electrode materials—Germany 2. Micro FIAT A 350, Frames 4413-4415 3. Micro BIOS FD 31/47, Frames 4413-4415

PB 95612

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Simple method for the determination of the reactive capacity of solid fuels. 1938. Frames 4416-4431 (Text in German) Enl Pr $3.75

I. Fuels—Ignition—Germany 2. Micro FIAT A 350, Frames 4416-4431 3. Micro BIOS FD 55/47, Frames 4416-4431

PB 95612

Vereinigte Deutsche Metallwerke A. G., Heddernheim, Ger.

Lead bronze and lead bronze compound castings with special regard to high duty bearings, by H. Mann. 1942. Frames 4432-4457 (Text in German) Enl Pr $5.00

I. Lead bronze—Production—Germany 2. Bearings, Lead bronze—Germany 3. Micro FIAT A 350, Frames 4432-4457 4. Micro BIOS FD 465/47, Frames 4432-4457

PB 95612

Haas, Max

Modern scrap refining processes in the light metal industry. n.d. Frames 4458-4473 (Text in English) Enl Pr $3.75

I. Scrap metal—Refining—Germany 2. Micro FIAT A 350, Frames 4458-4473 3. Micro BIOS FD 3157/47, Frames 4458-4473

PB 95612

Haas, Max

Substitution of bronze by silumin gamma in the production of "worm wheel rims". n.d. Frames 4474-4482 (Text in English) Enl Pr $2.50

1. Silumin-gamma—Uses—Germany 2. Micro FIAT A 350, Frames 4474-4482 3. Micro BIOS FD 3159/47, Frames 4474-4482

PB 95612

Haas, Max

Present position and the future possibilities for producing aluminium. Production of calcium aluminate slag. 1945. Frames 4483-4495 (Text in English) Enl Pr $3.75

1. Alumium—Production—Germany 2. Micro FIAT A 350, Frames 4483-4495 3. Micro BIOS FD 3298/47, Frames 4483-4495

PB 95612

Haas, Max

Technical processes for the thermal production of magnesium. n.d. Frames 4496-4518 (Text in German or English) Enl Pr $5.00

1. Magnesium—Production—Germany 2. Micro FIAT A 350, Frames 4496-4518 3. Micro BIOS FD 3299/47, Frames 4496-4518

PB 95612

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.

Oxidic deposits through screen formation in the pouring of steel. New types of melting installations for high grade steel works. 1943-1944. Frames 4519-4534 (Text in German) Enl Pr $3.75

1. Steel—Production—Germany 2. Micro FIAT A 350, Frames 4519-4534 3. Micro BIOS FD 3362/47, Frames 4519-4534

PB 95612

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.

Manufacture of special pig iron, the blast furnace burden and the charging gear. 1943-1944. Frames 4535-4547 (Text in German) Enl Pr $3.75

1. Iron—Manufacture—Germany 2. Micro FIAT A 350, Frames 4535-4547 3. Micro BIOS FD 3364/47, Frames 4535-4547

PB 95612

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.

Manufacture of chromium steels in basic Siemens-Martin furnaces and arc furnaces. 1943. Frames 4548-4557 (Text in German) Enl Pr $2.50

1. Steels, Chromium—Manufacture—Germany 2. Micro BIOS FD 3363/47, Frames 4548-4557 3. Micro FIAT A 350, Frames 4548-4557

PB 95612

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.

Saving of manganese. Development of improvements in the linings of Thomas converters. The influence of the shape of the converter on the nitrogen content in steel. 1944. Frames 4558-4597 (Text in German) Enl Pr $6.25

1. Manganese—Conservation—Germany 2. Micro FIAT A 350, Frames 4558-4597 3. Micro BIOS FD 3370/47, Frames 4558-4597

PB 95612

Krupp, Freidrick, A. G., Essen, Ger.

Aluminizing method. Preliminary preparations for the manufacture of Mishima steel and scientific problems relating to it. Casting processes and cupola furnaces. Gas turbine blade materials. Carbon electrode materials. Compound centrifugally cast bearings, bronze on steel. n.d. Frames 4598-4634 (Text in German) Enl Pr $6.25

1. Aluminum—Production—Germany 2. Steel—Manufacture—Germany 3. Furnaces, Blast—Cupola—Temperature—Germany 4. Turbines, Gas—Blades—Germany 5. Electrodes—Carbon—Germany 6. Bearings—Bronze-steel—Germany 7. Micro BIOS FD 3033/47, Frames 4598-4634 8. Micro FIAT A 350, Frames 4598-4634

PB 95612

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Reports on methods of producing peroxides, especially H_2O_2. 1935-1942. Frames 4635-4688 (Text in German) Enl Pr $6.25

1. Hydrogen peroxide—Production—Germany 2. Micro BIOS FD 3121/46, Frames 4635-4688 3. Micro FIAT A 350, Frames 4635-4688

PB 95612

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Report on flame velocity. 1944. Frames 4669-4699 (Text in German) Enl Pr $5.00

1. Flame velocities—Germany 2. Micro FIAT A 350, Frames 4669-4699 3. Micro BIOS FD 12/47, Frames 4669-4699

PB 95612

Felten & Guilleaume Carlswerk A. G., Cologne, Ger.

Research on pre-stressed wire for reinforced concrete. 1946. Frames 4700-4703 (Text in English) Enl Pr $2.50

1. Wire—Stresses—Germany 2. Concrete, Prestressed—Germany 3. Micro FIAT A 350, Frames 4700-4703 4. Micro BIOS FD 526/47, Frames 4700-4703

PB 95612

Deutsche Edelstahlwerke A. G., Bochum, Ger.

D.E.W. Hochfrequency tiegelstahl (high frequency crucible steel). Mould casting process for high alloyed steels. 1945. Frames 4704-4713 (Text in English) Enl Pr $2.50

1. Steel alloys—Casting—Germany 2. Micro FIAT A 350, Frames 4704-4713 3. Micro BIOS FD 529/47, Frames 4704-4713

PB 95612

Deutsche Gold- und Silberscheideanstalt, Kalscheuren, Ger.

Carbon black. 1946. Frames 4714-4726 (Text in German) Enl Pr $3.75

1. Carbon black—Production—Germany 2. Micro FIAT A 350, Frames 4345-4726 3. Micro BIOS FD 537/47, Frames 4714-4726

PB 95622

France. Ministère de la Production.

Miscellaneous reports dealing with metals. n. d. 354f (Text in German) Mi $9.00 Enl Pr $46.25

See PB 95622s for abstracts. 10p. Mi $1.25 Ph $1.25

1. Micro FIAT A 353, Frames 5337-5691

PB 95622

Krupp, Friedrich, A. G., Essen, Ger.

Metallurgical research. 1943-1944. Frames 5337-5339 (Text in German) Enl Pr $2.50

1. Metallurgy—Germany 2. Micro FIAT A 353, Frames 5337-5339 3. Micro BIOS FD 3374/47, Frames 5337-5339

PB 95622

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Estimation of the relative low-temperature-carbonization systems on the Lurgi flush-gas oven basis by Dr. Baehr. 1942. Frames 5340-5372 (Text in German) Enl Pr $6.25

1. Carbonization, Low temperature—Germany 2. Micro FIAT A 353, Frames 5340-5372 3. Micro BIOS FD 3305/46, Frames 5340-5372

PB 95622

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.

The new "Geisen" low temperature retort of Rheinmetall-Borsig. Low temperature carbonisation plant "Ost". Exchange of experiences in Brüx on improvements in the Lurgi low temperature retort. 1936-1943. Frames 5373-5393 (Text in German) Enl Pr $3.75

1. Carbonization, Low temperature—Germany 2. Retorts, Low temperature—Germany 3. Micro BIOS FD 3358/46, Frames 5373-5393 4. Micro FIAT A 353, Frames 5373-5393

PB 95622

Krupp, Friedrich A. G., Essen, Ger.

Intercrystalline stress corrosion of soft ingot iron. 1939. Frames 5394-5522 (Text in German) Enl Pr $17.50

1. Iron—Crystallization—Germany 2. Soft iron—Germany 3. Micro BIOS FD 3379/47, Frames 5394-5522 4. Micro FIAT A 353, Frames 5394-5522

—62288

PB 95622

Krupp, Friedrich A. G., Essen, Ger.

Measurements for magneto-striction. 1939-1942. Frames 5523-5659 (Text in German) Enl Pr $18.75

1. Steel alloys—Magnetic properties—Germany 2. Micro BIOS FD 3381/47, Frames 5523-5659 3. Micro FIAT A 353, Frames 5523-5659

PB 95622

Krupp, Friedrich A. G., Essen, Ger.

Tests for burning damage to gun barrel steels. 1939. Frames 5660-5691 (Text in German) Enl Pr $6.25

1. Steel, Gun—Tests—Germany 2. Micro BIOS FD 3382/47, Frames 5660-5691 3. Micro FIAT A 353, Frames 5660-5691

PB 96783

Freeman, J. W. and Cross, Howard C.

NACA and office of naval research metallurgical investigation of two large forged discs of S-590 alloy. Feb 1949. 52p photos, diagrs, graphs, tables Mi $2.75 Ph $7.50

Properties of large forged discs of S-590 alloy at room temperature, 1200°, 1350°, and 1500° F were studied to determine the level of properties obtainable in forgings required for the rotor discs of gas turbines. One disc was aged after forging; the other, solution-treated and aged. A limited amount of testing was done on the solution-treated disc prior to aging. Results are given for tensile, impact, rupture, time-deformation, creep, and structural-stability tests. NACA TN 1760

PB 96075

Freyer, R.

Zur knickung von langs und querversteiften ebenen blechen. (The buckling of a longitudinally and transversely stiffened flat plates). 1943. 7p diagrs Mi $1.25 Ph $1.25

From Technical Reports (Technische berichte) v. 10, no. 2, 1943 pp. 45-48

Legends in German

When a smooth metal panel that has been stiffened in both longitudinal and transverse directions is subjected to pressure stresses the transverse rigidity as well as rigidity of the longitudinal stiffeners has a very great effect on the buckling load. The critical load in such a sheet of metal whose edges are unsupported or only very slightly supported is deduced as a function of the rigidity of both stiffeners and for within and above the elastic limit. Micro GDC 10/8008T, translation.

PB 91484

Heraeus Vacuum Schmelze A. G., Hanau, Ger.

Technical data on Heraeus alloys including Megapyr Megatherm and Ferropyr. 1942. 52f (Text in German) Mi $2.75 Enl Pr $8.75

No abstract available

1. Megapyr (Trade name) 2. Megatherm (Trade name) 3. Ferropyr (Trade name) 4. Alloys—Production—Germany 5. Micro BIOS FD 1183/47, Frames 1-52

PB 27097

Hess, W. F. and Nippes, E. F.

Electric resistance brazing of structural aluminum alloys: Electric resistance bonding of low melting alloys electroplated and sprayed on structural aluminum alloy surfaces. Final report. Sep 1945. 31p photos., graphs Limited supply mimeo $1.00; thereafter, Mi $1.00 Ph $3.00 (Bib. v. 2, p. 280)

1. Aluminum alloys—Brazing 2. Joints, Brazed—Aluminum 3. WMC W-214

PB 70395s2

I. G. Farbenindustrie A. G., Frankfurt-Griesheim, Ger.

Oxy-acetylene and similar welding and hardening with some miscellaneous matter on plastics. Abstract. 1930-1945. 13p Mi $1.75 Ph $2.50

Abstract of Micro FIAT CC 46, Frames 1-1054 (PB 70395)

1. Micro FIAT CC 46, Frames 1-1054, abstracts

PB 96110

Jarosch, E.

The compression strength of short section and tubes. Dec 1944. 16p graphs, tables Mi $1.75 Ph $2.50

Legends in German

Experimental data have been used to develop equations for the compression strength of short, light-alloy sections and tubes. This affords a simple means of determining the true load-carrying capacity necessary for dimensioning parts, the theoretical analysis of which, if at all possible, is extremely difficult. ZWB UM 8013, translation

PB 92530

Kaiser Wilhelm Institut für Eisenforschung, Clausthal, Ger.

Development of specially treated soft steel for use as a substitute for scarce nonferrous metals. n.d. 3f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

1. Steel, Soft—Production—Germany 2. Metals, Non-ferrous—Substitutes—Germany 3. Micro BIOS FD 696/48, Frames 1-2

PB 93012

Kaiser Wilhelm Institut für Eisenforschung, Clausthal, Ger.

Magnetic properties of creep-resistant steels. May 1945. 1f (Text in German) Mi $1.25 Enl Pr $2.50

No abstract available

1. Steel—Magnetic properties—Germany 2. Steel, Creep-resistant—Germany 3. Micro BIOS FD 692/48, Frame 1

PB 73426s2

Kohle & Eisenforschung, G.m.b.H., Düsseldorf, Ger.

Reports on the testing and examination of iron and steel parts, metals, refractories and other materials and products. Abstract. 1938-1943. 24p Mi $2.00 Ph $3.75

Abstract of Micro FIAT L 9, Frames 1-742 (PB 73426)

1. Micro FIAT L 9, Frames 1-742, abstracts

PB 95517

Krupp, Friedrich A. G., Essen, Ger.

Research in high speed steels. 1930-1943. 556f (Text in German and English) Mi $9.00 Enl Pr $72.50

See PB 95517s for abstracts. 1p. Mi $1.25 Ph $1.25

1. Steel—High speed—Germany 2. Micro BIOS FD 4185/47, Frames 1-555 3. Micro BIOS DOC 1732/3034-(194-313), Frames 1-555

PB 16277

Kuzmick, Jerome F. and others.

The effect of particle size of iron powder on the physical properties of the powder and of iron powder compacts. Final report. Sep 1945 91p graphs, tables Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $7.00 (Bib. v. 1, p. 1251)

1. Powders, Metallic 2. Metallurgy, Powder 3. Iron powders 4. WMC W-223

PB 22675

Kyle, Peter E.

Correlation of information on the production and properties of magnesium alloy castings and forgings: General problems associated with the production, properties and uses. Report, Jul 19, 1944. Aug 1944. 6p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $1.00 (Bib. v. 1, p. 1578)

1. Magnesium alloys 2. WMC W-140

PB 23118

Kyle, P. E.

Utilization of secondary aluminum—uses and practices. Advisory report, Sep 11, 1944. Oct

1944. 81p Limited supply mimeo $1.00; thereafter, Mi $1.00 Ph $6.00 (Bib. v. 2, p. 281)
I. Aluminum alloys 2. WMC W-145

PB 96658

Netherlands. Military Mission, Ministry of Economic Affairs.
Untersuchungen über das verhalten von metallkontakten. (Research on the behavior of metal contacts: Interrogation of Prof. A. Esau). n.d. 2p (Text in German) Mi $1.25 Ph $1.25
Report number 12
...is report will not reproduce well
I. Contacts, Metal—Germany

PB 22737

Reichelderfer, C. A. and Gonser, B. W.
Investigation of industrial uses of tin-free and low-tin solder: Part III. Final report, Sep 20, 1943—Mar 20, 1944. Jul 1944. 56p photos, tables Limited supply mimeo $1.00; thereafter, Mi $1.00 Ph $4.00 (Bib. v. 2, p. 201)
I. Solders 2. Soldering 3. WMC W-126

PB 16396

Rote, F. B. and others.
Production and properties of magnesium press and hammer forgings. Jan 1945. 176p Limited supply mimeo $1.00; thereafter, Mi $2.00 Ph $11.00 (Bib. v. 1, p. 1410)
I. Magnesium—Forging 2. OPRD W-173

PB 16395

Rote, F. B. and others.
Production and properties of magnesium press and hammer forgings: Third progress report. Jun 1945. 92p Limited supply mimeo $1.00; thereafter, Mi $1.00 Ph $7.00 (Bib. v. 1, p. 1410)
I. Magnesium—Forging 2. OPRD W-190

PB 18812

Seil, G. E. and others.
Tests for classifying scrap metals: (The copper base alloys). Progress report, Jan 15—Apr 15, 1943. May 1943. 11p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $1.00 (Bib. v. 1, p. 1187)
I. Metals, Scrap—Copper alloys 2. WMC W-25

PB 18814

Seil, G. E. and others.
Tests for classifying scrap metals. Progress report, Feb 5, 1943. Feb 1943. 19p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $2.00 (Bib. v. 1, p. 1189)
I. Metals, Scrap—Classifying 2. WMC W-13

PB 82368s

Siegfried, Junghans
Development of methods and equipments for the production of semi-finished metal. Aug 1945. 154p photos, diagrs, drawings Mi $6.00 Ph $20.00
I. Metals—Production—Germany

PB 17644

Steinour, H. H.
Particle size distribution of iron powders for powder metallurgy and separation of iron powders into various particle size fractions. May 1944 13p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $1.00 (Bib. v. 1, p. 1412)
I. Metallurgy, Powder

PB 17645

Steinour, Harold H.
Particle size distribution of iron powders for powder metallurgy and separation of iron powders into various particle size fractions: Second progress report. Jul 1944. 21p Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $2.00 (Bib. v. 1, p. 1253)
I. Metallurgy, Powder

PB 96859

Studiengesellschaft Hartmetall, Berlin.
Research into the strength of hard metals and hard metal alloys at high temperatures. 1938-1940. 6f (Text in German) Mi $1.25 Enl Pr $2.50
See PB 96859s for abstracts. 2p. Mi $1.25 Ph $1.25
I. Metals—Strength—Germany 2. Alloys—Strength—Germany 3. Metallurgy—Germany 4. Micro BIOS FD 3819/47, Frames 1-5

PB 96856

Studiengesellschaft Hartmetall, Berlin.
Solubility of tungsten carbide in vanadium carbide and the resultant theories on recrystallization, by Drs. Dawihl and Rix. 1939. 6f (Text in German) Mi $1.25 Enl Pr $2.50
See PB 96856s for abstracts. 1p. Mi $1.25 Ph $1.25
I. Tungsten carbides—Solubility—Germany 2. Micro BIOS FD 3813/47, Frames 1-5

PB 96858

Studiengesellschaft Hartmetall, Berlin.
Use of hard metal containing tantalum and titanium carbides for machining steel and cast iron. 1939. 8f (Text in German) Mi $1.25 Enl Pr $2.50
See PB 96858s for abstracts. 1p. Mi $1.25 Ph $1.25
I. Alloys, Hard—Uses—Germany 2. Micro BIOS FD 3810/47, Frames 1-7

PB 94998

Sutton, H. and Crowther, J.
High strength aluminium zinc-magnesium alloy development in Germany. Jul 1946. 25p tables Mi $2.00 Ph $3.75

1. Aluminium-Magnesium-zinc alloy—Germany 2. I. G. Farbenindustrie A. G. 3. Vereinigte Leichtmetall-Werke G.m.b.H., Hanover, Ger. 4. Dürener Metallwerke A. G., Berlin 5. BIOS FR 1770, Item 21

PB 97271

Tobelmann, Henry A. and Morgan, Harry J.
Review of the Nicaro Nickel Project, Nicaro, Oriente, Cuba. Plancor 690. Jan 1948. 159p drawing, map, tables Mi $6.00 Ph $20.00
Pages 38-42 are missing
1. Nickel—Production—Cuba 2. Nicaro Nickel Company, Oriente, Cuba

PB 21412a4

U. S. Aeronautical Board.
Heat treatment of magnesium alloy castings; process for. Dec 1948. 2p Mi $1.25 Ph $1.25
Amendment to PB 21412

PB 93651r

U. S. Aeronautical Board.
Wire; thermocouple lead; specification AN-W-29. Dec 1948. 1p Mi $1.25 Ph $1.25
Revision of PB 93651

PB 21186r

U. S. Air Force and U. S. Navy Dept.
Aluminum alloy (14); extruded bars, rods and shapes. Air Force-Navy aeronautical specification. Oct 1948. 8p tables Mi $1.25 Ph $1.25
Revision 1 of PB 21186

PB 94723

U. S. Air Force and U. S. Navy Dept.
Chemical films for aluminum and aluminum alloys. Specification AN-C-170. Air Force-Navy aeronautical bulletin. Sep 1948. 1p Mi $1.25 Ph $1.25
1. Aluminum alloys—Chemical films

PB 94711

U. S. Air Force and U. S. Navy Dept.
Flux: Magnesium alloy welding. Air Force-Navy aeronautical bulletin. Sep 1948. 1p table Mi $1.25 Ph $1.25
1. Magnesium alloys—Welding—Fluxes 2. Fluxes, Welding

PB 21512a

U. S. Air Force and U. S. Navy Dept.
Magnesium alloy: Sand castings. Air Force-Navy aeronautical specification. Oct 1948. 3p Mi $1.25 Ph $1.25
Amendment 1 to PB 21512

PB 21503a

U. S. Air Force and U. S. Navy Dept.
Magnesium alloy (3.0 aluminum, 1.0 zinc); Extruded bar, rod, and shapes. Nov 1948. 2p tables Mi $1.25 Ph $1.25
Revision of PB 21503

PB 95634

U. S. Air Force and U. S. Navy Dept.
Nut: Sleeve coupling. Nov 1948. 1p drawings Mi $1.25 Ph $1.25
1. Couplings, Sleeve 2. Nuts—Standards 3. AN 817

PB 21502a

U. S. Air Force and U. S. Navy Dept.
Specification; magnesium alloy (1.5 manganese) Extruded bar, rod, and shapes. Nov 1948. 2p drawing Mi $1.25 Ph $1.25
Amendment to PB 21502

PB 21501a

U. S. Air Force and U. S. Navy Dept.
Specification; magnesium alloy (8.5 aluminum, 0.5 zinc); extruded bar, rod, and shapes. Nov 1948. 3p table Mi $1.25 Ph $1.25
Amendment to PB 21501

PB 95301

U. S. Air Force and U. S. Navy Dept.
Valves: Hydraulic pressure relief. Air Force-Navy aeronautical bulletin. Oct 1948. 2p tables Mi $1.25 Ph $1.25
1. Valves, Hydraulic 2. AN AB 116e 3. AN V-1 4. AN 6200

PB 87142

U. S. Army Air Forces.
Set: Research, metallurgical, materials laboratory. Feb 1947. 10p tables Mi $1.25 Ph $1.25
1. Metallurgy—Research 2. Metals—Research 3. Laboratories, Metallurgical 4. AAF TO 00-30-787

PB 70021s2

Vereinigte Aluminum Werke A. G., Lautawerk, Lausitz, Ger.
Aluminium production. Abstract. 1930-1944. 11p Mi $1.75 Ph $2.50
Supplement 2 to PB 70021
1. Micro FIAT G 11, Frames 17701-18829, abstract

PB 70023s2

Vereinigte Aluminiumwerke, Lausitz, Ger.
Aluminium refining. Abstract. 1927-1944. 6p Mi $1.25 Ph $1.25
Supplement 2 to PB 70023
1. Micro FIAT K 3, Frames 1-733, abstracts

PB 70028s2

Vereinigte Aluminiumwerke A. G., Lautawerk Lausitz, Ger.
Production of alumina and aluminium by electrolysis. Abstract. 1922-1944. 5p Mi $1.25 Ph $1.25
Supplement 2 to PB 70028
1. Micro FIAT K 9, Frames 5446-6456, abstract

METEOROLOGY AND CLIMATALOGY

PB 96115

Findeisen, W.

Meteorologischphysikalische bedingtheiten der vereisung in der atmosphare. (The physico—meterological factors giving rise to ice accretion in the atmosphere). Oct 1938. 6p photos, diagrs Mi $1.25 Ph $1.25

Legends in German

I. Gr. Brit. Ministry of Supply 2. Ice formation—Germany 3. Meteorology, Aeronautical—Germany 4. Micro GDC 10/6189T, translation

PB 92483

Grave, Caswell II.

Comparative and functional test of the U. S. Weather Bureau 500-gram balloon and standard balloon ML-391/AM 1400-Gram. Dec 1948. 44p photos, tables Mi $2.50 Ph $6.25

I. Balloons, Meteorological 2. U. S. Weather Bureau 3. APGC Proj 34824-5

PB 92965

Irinyi, Arnold.

Die Galilei-Newton-Irinyi'sche, Kerpuskular-Mechanik. 1930. 31p tables Mi $2.25 Ph $5.00

I. Atmosphere—Composition—Germany

PB 95667

Kato, Yoshio.

New theory on the magnetic storm. n.d. 4p graphs Mi $1.25 Ph $1.25

This report may not reproduce well

I. Storms, Magnetic 2. Tohoku Imperial University. Geophysical Institute, Sendai, Japan

PB 96731

Kline, Dwight B.

Investigation of meteorological conditions associated with aircraft icing in layer-type clouds for 1947-48 winter. Jan 1949. 12p diagrs, table Mi $1.75 Ph $2.50

Measurements of liquid-water content, drop size, and temperature during icing conditions encountered in flight are shown to be consistent with previously measured conditions and with proposed maximum icing conditions in supercooled layer-type clouds. Cumulative-frequency graphs of meterological parameters are presented indicating the frequency with which various icing conditions have been encountered in the Great Lakes area and surrounding states during two winters of flight observations. NACA TN 1793

PB 96811

Regener, Erich

Atmospheric turbulence and the ozone layer. Translation number 1. Aug 1946. 22p charts, diagrs, graphs Mi $2.00 Ph $3.75

—62288

Published in Transactions of the German Academy for aeronautical research, v. 2, pamphlet 3, 1943

I. Flow, Turbulent 2. Ozone 3. Atmosphere—Measurements 4. Ionization 5. Altitude 6. U. S. Ordnance Dept.

PB 95880

Sveriges Meteorologiska och Hydrologiska Institut. Stockholm.

Arsbok 1947. 1. Månadsöversikt över väderlek och vattentillgång. Jan 1948. 80p charts, tables (Text in Swedish) Mi $3.50 Ph $10.00

I. Precipitation—Sweden 2. Hydrology—Sweden

PB 95663

Wadati, Kiyoo

Alterations in the meteorological work in Japan since 1939. International Association of Meteorology, Oslo Assembly, August 1948. Aug 1948. 11p Mi $1.75 Ph $2.50

I. Meteorology—Japan 2. Central Meteorological Observatory, Tokyo

PB 96015

Zentrallblatt für geophysik, meteorologie und geodäsie (Journal of geophysics, meteorology and geodesy). v. 7, nos. 4-8. Apr-Jul 1941. v. 8, nos. 1-9. Jul-Mar 1941/1942. v. 9, nos. 1-9. Mar-Nov 1942. v. 10, nos. 1-7. Oct-Jun 1942/1943. 819f (Text in German) Mi $9.00 Enl Pr $106.25

I. Geophysics 2. Meteorology 3. Geodesy 4. Micro FIAT K84, Frames 6531-7350

MINERALS AND MINERAL PRODUCTS, INCLUDING STONE, CLAY AND GLASS

PB 96486

Applied Research Laboratories Inc., Glendale, Cal.

Spectrographic analysis of ceramic materials. Final Report. Jun 1948. 75p photos, drawings, graphs, tables Mi $3.50 Ph $10.00

I. Titanium oxides—Spectrographic analysis 2. Strontium titanates—Spectrographic analysis 3. Barium titanate—Spectrographic analysis 4. Magnesium titanates—Spectrographic analysis 5. Calcium titanates—Spectrographic analysis 6. Ceramic materials—Spectrographic analysis 7. U. S. Fort Monmouth Signal Laboratory

PB 40316s2

Auer-Gesellschaft A. G., Berlin N 65.

Chemistry-ceramics-zirconium glazing enamels. Apr 1943. 13p (Text in German) Mi $1.75 Ph $2.50

Translation of PB 40316

I. FIAT FR 794, suppl. 2

PB 96364

Beatty, K. O., Jr. and Adair, R. B.

Evaluation of North Carolina raw materials for the production of Portland cement. Dec 1948.

50p photos, diagr, map, tables Mimeo: $.35

1. Cement industry 2. Cement—Manufacture 3. NCSC SE B 42

PB 70122s2

Eitel, W.

Manuscript of a new edition (3rd) of a book on the physical chemistry of silicates. Abstract. 1945. 2p Mi $1.25 Ph $1.25

Supplement to PB 70122

1. Micro FIAT P1, 00001-00373, abstract 2. Micro FIAT K 2, 000002-000293, abstract

PB 96629

Forslind, Erik and Bergstrom, Sven G.

Studier rörande rábetongens egenskaper. (Studies on the properties of fresh concrete). 1. Rabetongens egenskaper. (Some properties of fresh concrete by E. Forslind. 2. Mätning av fluiditet hos betong och cementpasta. (Determination of the fluidity of concrete and cement paste) by S. G. Bergstrom. Apr 1948. 35p photos, diagrs, graphs, tables (Text in Swedish) Mi $2.25 Ph $6.25

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Discussion by V. Bährner and P. Hallstrom

1. Concrete—Tests—Sweden 2. Concrete—Research—Sweden 3. Svenska. Forskningsinstitutet för Cement och Betong vid Kungl. Tekniska Högskolan I Stockholm. Meddelanden 12

PB 96002

Glastechnische berichte. (Glass technique reports). v. 20, Nos. 1-12. 1942. v. 21, Nos. 1-11. 1943.

Deutsche keramischen gesellschaft. Berichte. (German ceramic association. Reports). v. 21, Nos. 1-12. 1940. v. 11-20, Index. 1930-1039. 720f (Text in German) Mi $9.00 Enl Pr $92.50

1. Glass—Periodicals—Germany 2. Ceramics—Periodicals—Germany 3. Micro FIAT E 107, Frames 4193-4913

PB 96197

Hursh, R. K. and Morgan, W. R.

Determination of factors affecting size variation in clay products. Jun 1948. 19p illus, graphs, tables Mimeo: $.50

Reprint from the journal at the American Ceramic Society

1. Clay industries—Standards 2. Ceramic materials 3. Shale 4. Clay minerals 5. Hydrometers

PB 32545s2

Krieble, R. H.

Synthetic mica. Dec 1946. 2p tables Mi $1.25 Ph $1.25

1. FIAT FR 746-2 2. FIAT MCF 569

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PB 36189t

Perkuhn, H. and Küch, W.

The thermal expansion of synthetic glasses. Mar 1941. 5p chart, table Mi $1.25 Ph $1.25

Translation of PB 86189

Legends in German

The mean coefficients of thermal expansion of the synthetic glasses M33, M132, M222, astralon and reilit were determined. ZWB FB 1358, translation.

PB 95518

Raw material for glass-making: Sources of supply up to now. Oct 1948. 114f Mi $4.75 Enl Pr $16.25

See PB 95518s for abstracts. 37p. Mi $2.25 Ph $5.00

1. Glass making materials—Germany 2. Micro BIOS FD 1877/47, Frames 2, 5-123

PB 93630s

Stein & Erden G.m.b.H., Goslar, Ger.

German limestone quarries. Processing of limestone in mechanised quarries to obtain a clean product for limeburning and chemicals. Jun 1948. 4p drawing only Mi $1.25 Ph $1.25

1. BIOS FR 1683, Supp. 1

PB 95647

Supreme Commander for the Allied Powers, Natural Resources Section.

Asbestos resources of Japan. Oct 1948. 43p plate, tables, drawings, maps Mi $2.50 Ph $6.25

Significant development of the asbestos deposits in Japan Proper started as a wartime necessity after normal imports ceased in 1941. Encouraged by government subsidies, production reached a high of more than 12,000 tons of low-grade fiber in 1944. Production almost ceased in August 1945, but the industry made a slight recovery in 1946-47. The deposits are all low grade. Most of the fiber is below grade 5Z, Canadian standard grading. Less than one percent can be used for spinning purposes. Short fibers are absorbed chiefly by the cement industry for making tiles, shingles, siding, sheeting, insulating material, and other building products. Some of the asbestos dust is used in fireproof paints or for fire prevention in coal mines. Present domestic production is chiefly chrysotile asbestos, and 94 percent of the chrysotile comes from the south central Hokkaido district. All the chrysotile is obtained from open cuts in serpentinized basic rocks. Domestic production of amphibole asbestos comes from Kyushu, where the deposits are also mined by open-cut methods. None of the Kyushu mines is in operation at present. Both dry and wet methods are used in asbestos milling, but the dry method is more important. The large chrysotile asbestos producers in Hokkaido use a dry milling system patterned after Canadian methods. The future of the asbestos industry in Japan depends

mainly upon possible expansion of the Japanese cement industry. Surface outcrops and scattered drill holes indicate reserves of low-grade asbestos adequate to supply the domestic demand for many years. The manufacture of premium products for export will continue to depend upon imports of better grades of asbestos. SCAP NRS 115.

PB 96184

Vieweg, R.

The electrical properties of organic glasses. Jun 1939. 21p charts, fold table Mi $2.00 Ph $3.75

Translation from the German

I. Glass, Synthetic—Electrical properties 2. Gr. Brit. Ministry of Supply 3. Micro GDC 10/5099T, translation

PB 96630

Wästlund, Georg and Jonsson, Per Olov

Undersökning rörande sprickbildning i armerade betongkonstruktioner. (Investigation on formation of cracks in reinforced concrete structure). Sep 1948. 12p graphs, tables (Text in English) Mi $1.75 Ph $2.50

Reprint from Preliminary Publication, International Association for bridge and structural engineering. Third Congress. Liege 13-18 September 1948

Summary in French, German and English

Title in Swedish, French, German and English

Svenska. Forsknings-institutet för Cement och Betong vid Kungl. Tekniska Högskolan I Stockholm. Meddelanden 13

This paper deals with an investigation on crack formation in reinforced concrete structures. The investigation comprises laboratory tests on T-beams and crack measurements on seven bridges. The purpose of the laboratory tests was to determine the effects produced by various factors on crack formation. One series of test specimens was subjected to positive moments. The results of these tests can briefly be summarized as follows: 1° width of cracks increases almost linearly with the diameter of reinforcement bars; 2° width of cracks becomes slightly smaller as the ratio of reinforcement increases; 3° the use of deformed lug and helical bars, as compared with plain bars, reduces the width of cracks, assuming the diameters of reinforcement bars and the stresses set up in the reinforcement to be the same; 4° the compressive cube strength of concrete does not exert any notable influence on the width of cracks. Another series of test specimens was submitted to negative moments. The preliminary results of these tests show that the width of cracks is reduced when reinforcement bars are properly distributed across the whole flange of the beam. In the crack measurements made on seven bridges, cracks were recorded and the width of cracks was measured. All these bridges showed fairly regular formation of cracks, and the number of cracks observed on each bridge was unusually large.

PB 18809

Whittaker, H. and Roberts, J. T.

Substitution of lower quality industrial diamonds. Final reports, parts I and II, including progress for the period Sep 30, 1943 to Jun 30, 1944. 40p graphs, photos, tables Limited supply mimeo $1.00; thereafter, each Mi $.50 Ph $3.00 (Bib. v. 2, p. 78)

I. Diamonds 2. WMC W-137 3. WMC W-87

PB 18808

Whittaker, H.

Substitution of lower quality industrial diamonds: Thread grinder dresser octahedrons. Progress report, Jul 1-Sep 30, 1943. Dec 1943. 20p tables Limited supply mimeo $1.00; thereafter, Mi $.50 Ph $2.00 (Bib. v. 2, p. 78)

I. Diamonds 2. WMC W-68

PAPER AND ALLIED PRODUCTS

PB 96636

British Jute Trade Research Association, Dundee, Scotland.

The jute industry in Germany during the period 1939-1945. 1949. 24p table Mi $2.00 Ph $3.75

I. Jute industry—Germany 2. Paper—Manufacture—Germany 3. Jute—Fungus proofing—Germany 4. Jute—Waterproofing—Germany 5. BIOS OR 17

PB 95981

Papier-fabrikant. (Paper manufacturer). v. 40, Nos. 1-52. 1942. v. 41, Nos. 1-9. 1943. v. 42, Nos. 1-4. 1944.

Vehütet unfälle. (Accident prevention). Nos. 1-10. Jan-Dec 1942. Nos. 1-3, 10-12. Jan-Mar, Oct-Dec 1943. 610f (Text in German) Mi $9.00 Enl Pr $78.75

I. Paper—Periodicals—Germany 2. Accidents—Periodicals—Germany 3. Micro FIAT 0 115, Frames 208-818

PHOTOGRAPHIC AND OPTICAL GOODS

PB 96869

British Intelligence Objectives Sub-Committee.

Report on the 0 to 2 metre zeiss measuring machine for external and internal measurement. Jun 1948. 25p photos, (5 fold drawings) Mi $2.00 Ph $3.75

This report supplements PB 19680 (Vol I, p. 1424) and describes the production of the 24 mm. Prontor II No. 0 inter-lens shutter at Alfred Gauthier G.m.b.H. Calmbach, Würtemburg, Germany. Appendixes cover: 1) Schedule of parts; 2) automatic lathe; 3) machining of the shutter body; and

4) machining of the main plate. BIOS FR 1809, Item 9

PB 96853

Deutsche Akademie der Luftfahrtforschung, Berlin.

Development of spark cinematography, by Carl Cranz. Physical processes with high loads and loading velocities, by Hubert Schardin, 1940. 145f (Text in German or English) Mi $5.75 Enl Pr $20.00

See PB 96853s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Ballistics—Research—Germany 2. Phototography, Ballistic—Germany 3. Micro BIOS FD 1807/48, Frames 1-144

PB 96493

Hart, C. A. and Miskin, E. A.

The effect of distortion of the photographic image upon survey from air photographs. Air survey research paper no. 12. n.d. 17p diagrs, graphs, tables Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.35

This paper has been written to give an indication of the significance of errors, arising through multifarious reasons, in the preparation of surveys from air photographs. Its primary object is to present the surveyor's point of view to those responsible for the development of air photographic technique. The effect of various distortions upon mapping accuracy will be considered, the desirable tolerances under various conditions discussed, and suggestions made where improvements might be effected. Air photographs are normally classified as "verticals" or "obliques." It is only with the former that this paper deals, although it may be applied to the use of oblique photographs insofar as the distortion of the photographic image is concerned. The methods used in the preparation of maps from air photographs vary considerably, and the instruments used are widely varying in design and accuracy, each suitable for its own purpose. If measurements are to be made which involve the "third dimension," then it is essential that perfection of the photographic image should be maintained, not only on the original negative but upon all subsequent media on which its positive image may be imposed.

PB 25689

Osborn, W. H.

Roasting garnet superfine flours. Final report, Oct 1, 1943—Oct 24, 1944. Nov 1944. 17p tables Limited supply mimeo $1.00; thereafter Mi $1.00 Ph $2.00 (Bib. v. 2, p. 305)

1. Garnet powder—Germany 2. WMC W-159

PB 82211t

Pollman, Wilhelm.

Process for producing real stereoscopic images. Oct 1948. 12p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $17.50

1. Micro FIAT G 51, Frames 8070-8079, trans

PB 82210t

Philips Patentverwaltung G.m.b.H., Berlin.

Process for physical development to obtain photographic contrasts. Oct 1948. 9p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $15.50

1. Micro FIAT B 77, Frames 4904-4911, trans

PB 73416s

Siemens-Schuckertwerke A. G., Berlin.

Aluminum surface-mirror coating. 1940-1941. 2p Mi $1.25 Ph $1.25

Abstract of Micro FIAT J 236, Frames 7044-7058 (PB 73416)

1. Micro FIAT J 236, Frames 7044-7058, abstract

PB 70381t2

Steinheil, C. A. & Söhne, Optische Werke, G.m.b.H., Munich, Ger.

Chemical treatment of glasses for increasing transmissivity. Oct 1948. 7p Available from Research Information Service, 509 Fifth Avenue, New York, N. Y. $7.50

1. Micro FIAT G 170, Frames 637-640, trans

PB 70381t

Steinheil, C. A. & Söhne, G.m.b.H., Optische Werke, Munich, Ger.

Process for increasing the chemical resistance and mechanical hardness of glasses. Oct 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York, N. Y. $4.00

1. Micro FIAT G 170, Frames 635-636, trans

PB 70381t5

Steinheil, C. A. & Söhne G.m.b.H., Optische Werke, Munich, Ger.

Process for manufacturing non-hygroscopic surfaces. Nov 1948. 6p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $9.00

1. Micro FIAT G 170, Frames 631-634, trans

PB 70381t6

Steinheil, C. A. & Söhne G.m.b.H., Optische Werke.

Process for optical improvement of glass surfaces. Oct 1948. 23p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $30.00

1. Micro FIAT G 170, Frames 657-672, trans

PB 96665

Theissing, Hans

Application of light scattering I. Oct 1948. 35p diagrs, tables Mi $2.25 Ph $5.00

A method is described for the application of Mie's theoretical results interpreted by Blumer's

graphs to practical problems of light scattering. The method accounts for the change of the real angular distribution functions with respect to Blumer's at higher densities due to the appearance of higher scattering orders and yields the respective light quantities in those different orders. As an example for a low density fog the scattered radiation emerging from a vapor trail at 90° away from the incident sunlight flux is considered in this paper, and the number of particles of several different sizes required for photographability is calculated. SCEL TM M-1149

PB 47205r

U. S. Air Force.
Set: Equipment, photographic, cold weather. Jun 1948. 4p tables Mi $1.25 Ph $1.25
1. AAF TO 00-30-840

PB 87143

U. S. Army Air Forces.
Set: Propogation study, photographic ground communications. Feb 1947. 2p tables Mi $1.25 Ph $1.25
1. Photography, Aerial—Equipment 2. Radar, Ground controlled approach 3. Radio waves—Propagation 4. AAF TO 00-30-790

PB 73663s

Voigtländer & Sohn, Braunschweig, Ger.
Brilliant B and Baby Bessa 6 x 6" camera drawings with drawings of voigtar, skopar and hellar lenses. 1937-1946. 2p Mi $1.25 Ph $1.25
Abstract of Micro FIAT CC 235, Frames 1-512 (PB 73663)
1. Micro FIAT CC 235, Frames 1-512, abstract

PB 90887

Zeiss, Earl, Optische Industrie, Jena, Ger.
The phase contrast method and its uses in microscopical examinations. 1941. 8f (Text in German) Mi $1.25 Enl Pr $2.50
Reprint from "Naturwissenschaften", No. 4, 1941
See PB 90887s for abstracts. 1p. Mi $1.25 Ph $1.25
1. Microscopy—Germany 2. Micro BIOS FD 1756/47, Frames 1-13

PB 55975s

Zeiss-Ikon A. G., Kontessawerk, Stuttgart, Ger.
Drawings for "Ikonta" photographic cameras. Abstract. 1937-1945. 2p Mi $1.25 Ph $1.25
1. Micro FIAT AA 176, Frames 801-1558A, abstract

PB 55986s

Zeiss-Ikon A. G., Contessa-Werke, Stuttgart, Ger.
Drawings for photographic cameras. Abstract. 1939-1945. 2p Mi $1.25 Ph $1.25
Abstract of Micro FIAT AA 175, Frames 1-800 (PB 55986)
1. Micro FIAT AA 175, Frames 1-800, abstracts

PB 73600t5

Zeiss-Ikon A. G., Dresden, Ger.
Photoelectric exposure meter with device for determining the color composition and the appropriate filter for color photographs. Mar 1948. 13p drawings Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $17.25
1. Filters, Photographic—Patents—Germany 2. Exposure meters, Photoelectric—Patents—Germany 3. Micro FIAT B 62, Frames 1678-1687, trans.

PB 82210t2

Zeiss-Ikon A. G., Berlin.
Process for stabilizing photographic emulsions. Oct 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $6.75
1. Micro FIAT B 77, Frames 5032-5035, trans

PHYSICS

General

PB 96666

Both, Eberhard
Magnetic materials with a rectangular hysteresis loop. Sep 1948. 15p photos, diagrs, tables Mi $1.75 Ph $2.50
This memorandum outlines the basic physical facts involved in the achievement of rectangular magnetic hysteresis characteristics, dealing especially with the conditions for and the mechanism of grain orientation and domain orientation. Some commercial and experimental materials are compared with regard to the most important characteristics for application in saturable reactors. SCEL TM M-1155

PB 96161

Gt. Brit. Ministry of Supply.
Method of computation for investigating a torsional vibration. n.d. 5p diagrs Mi $1.25 Ph $1.25
1. Vibration, Torsional—Germany 2. Micro GDC 11/356T, translation

PB 96095

Guderley, G.
Asmyptotische darstellungen für die partikularlosungen der hodographengliechung bei ebenen kompressiblen stromungen. (Asymtotic representations for special solutions of the hodographic equations in two-dimensional compressible flow). 1941. 32p Mi $2.25 Ph $5.00
1. Flow, Compressible—Germany 2. Mathematics, Applied—Aerodynamics—Germany 3. Gt. Brit. Ministry of Supply 4. Micro GDC 3E/244T, translation

PB 96120

Küeh, W. and Rein, W.

The strength and hygroscopic properties of light materials. Apr 1944. 27p diagrs, tables Mi $2.00 Ph $3.75

1. Gt. Brit. Ministry of Supply 2. Materials, Light—Tests—Germany 3. ZWB UM 1224, translation 4. Micro GDC 10/5205T, translation

PB 96247

Noeggerath, W.

Tables for the determination of the velocity of sound, the sound pressure ratio and of the characteristic value of expansion nozzles up to 3000° for ideal gases under consideration of the dependence of temperature on the specific heat. n.d. 24p graphs Mi $2.00 Ph $3.75

1. Gases—Specific heat 2. Nozzles, Gas 3. Sound—Pressure distribution 4. Sound—Speed 5. BIOS HEC 10679

PB 96155

Ohain, H. V.

Gas turbines: The history of a new principle for the utilisation of thermal energy. Oct 1945. 23p drawings, diagrs Mi $2.00 Ph $3.75

Legends in German

Parts of this report may not reproduce well

1. Turbines, Gas—Germany 2. Energy—Recovery—Germany 3. Thermal energy—Utilization—Germany 4. Thermodynamics—Germany 5. Gt. Brit. Ministry of Supply 6. Micro GDC 529T, translation 7. RTP/T1BT, translation

PB 95968

Physikalische berichte. (Physics reports). v. 22, Nos. 17-24. Sep-Dec 1941. v. 23, Nos. 1-2. Jan 1942. 592f (Text in German) Mi $9.00 Enl Pr $77.50

1. Physics—Periodicals—Germany 2. Micro FIAT O 100, Frames 1379-1505

PB 95966

Physikalische berichte. (Physics reports). v. 23, Nos. 13-24. Jul-Dec 1942. 818f (Text in German). Mi $9.00 Enl Pr $106.25

1. Physics—Periodicals—Germany 2. Micro FIAT O 102, Frames 2140-3055

PB 95963

Physikalische berichte. (Physics reports). v. 24, Nos. 1-24. Jan-Dec 1943. 842f (Text in German) Mi $9.00 Enl Pr $110.00

1. Physics—Periodicals—Germany 2. Micro FIAT O 103, Frames 3056-3977

PB 96204

Reichert, H.

Investigations on a pulsating flow in a pipe entry. Aug 1943. 40p tables Mi $2.25 Ph $5.00

Legends in German

1. Gr. Brit. Ministry of Supply 2. Flow, Pressure 3. Stroboscopes 4. Velocity, Angular—Measurements 5. ZWB FB 1983-5th, translation 6. Micro GDC 10/1463T, translation

PB 97210

Rubinowitz, Leo

Evaluation and development of noise-isolation mounts and mount materials. Dec 1948. 5p Mi $1.25 Ph $1.25

This progress report concerns a project to develop equipment and methods for evaluating the extent to which shipboard sound-isolation mounts reduce the machinery noise transmitted into the water in the frequency range of 30 to 30,000 cps. Primarily the report covers the determination of the basic principles of sound-isolation mounts by both theoretical and experimental studies. DWTMB 672

PB 95660

Sakai, Takuzo, and Isihara, Akira.

The statistical theory of rubber-like elasticity. n.d. 11p Mi $1.75 Ph $2.50

1. Elasticity 2. Rubber—Elasticity

PB 96175

Thorwart (Herr)

Peak spectra of light impulse sources. Dec 1944. 30p photos, charts, tables Mi $2.00 Ph $3.75

Translation from the German

1. Gt. Brit. Ministry of Supply 2. Spectra, Peak—Germany 3. Light sources—Germany 4. ZWB FB 2016, translation

PB 96653s

Todd, John and others.

Applied mathematical research in Germany with particular reference to naval applications. 1945. 2p Mi $1.25 Ph $1.25

Supplement 1 to PB 96653

See PB 96653 for subject headings

1. BIOS FR 79, Item 1, 29, 9, 25, 2, 4, abstract 2. BIOS FD 3013/48

PB 96277

Zeitschrift für physik. (Physics journal). v. 119, Nos. 1-12. 1942. v. 120, Nos. 1-12. 1943. 773f (Text in German) Mi $9.00 Enl Pr $101.25

1. Physics—Periodicals—Germany 2. Micro FIAT O 122, Frames 5127-5895

Nuclear

PB 96408

Anderson, H. L. and others.

Number of neutrons emitted by a Ra-Be source (source I). Mar 1942. 5p drawing, table (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Radium-beryllium—Neutrons 2. Atomic power—Research 3. MDDC 880

PB 96401

Bernhardt, H. A. and others.

Determination of oxygen in tank nitrogen by its conversion to water and the measurement of the dew-point temperature. n.d. 7p drawings, graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

A method was developed by which small concentrations of oxygen occurring in tank nitrogen may be determined by passing a mixture of nitrogen and hydrogen over "Carbide's Super Activated Copper Catalyst" at 325°C, in order to convert any oxygen present into water and measuring the resulting dew point temperature. A schematic drawing of the dew-point apparatus, a scale drawing of the dew-point meter, and two graphs are included. MDDC 1542

PB 96422

Boyd, Charles A. and others.

Investigations on the absorption spectra induced in single crystals of magnesium oxide by exposure to various types of radiation. Sep 1947. 16p graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Magnesia—Spectrographic analysis 2. Atomic power—Research 3. MDDC 1508

PB 96475

Cameron, A. E. and Eggers, D. F., Jr.

Ion velocitron. n.d. 6p drawing, graphs, table (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Accelerators 2. Velocitrons 3. Ionization 4. Atomic power—Research 5. MDDC 1641

PB 96424

Cohn, Waldo E. and Kohn, Harold W.

Ion-exchange separation of the alkali metals. n.d. 2p graph (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Metals, Alkali—Ions 2. Atomic power—Research 3. AECD 1810

PB 96485

Cook, Leslie J. and others.

Total cross sections of nuclei for 90 mev neutrons. Sep 1947. 4p tables (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Neutrons—Cross sections 2. Nuclei—Reactions 3. Atomic power—Research 4. MDDC 1399

—62288

PB 96377

DeBenedetti, S. and others.

Angular dependence of coincidences between fission neutrons. n.d. 9p photo, diagr. graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Coincidences between the neutrons from neutron-induced fission of U^{235} were measured using fast neutron counters, working on the principle of neutron recoil. From measurements at angles of 30, 60, 90, 135, and 180° between the directions of the fission neutrons it was found that the number of coincidences is fairly constant from 30 to 90°, and increases by about a factor 2 from 90 to 180° This result can be explained if it is assumed that the fission neutrons most probably come from opposite fragments. It is known that the phenomenon of fission is accompanied by the emission of neutrons, and from the existence of self-sustaining chain reactions it can be inferred that more than one neutron is emitted, on the average, during each fission process. On the other hand it has been shown that there exists an angular correlation between the direction of the neutrons and the direction of the fragments, the neutrons being preferentially emitted in the same direction as the fragments. These facts lead one to believe that coincidences between neutrons from a fission source should be detectable, and that a measurement of the angular distribution between neutron-neutron coincidences could yield information pertinent to the mechanism of emission of fission neutrons. The experiments described in this paper were performed to measure this angular distribution of neutron-neutron coincidences from a source of U^{235} irradiated with neutrons. AECD 2153

PB 96427

Dole, Malcolm

Behavior of the Philips ionization gauge in air. Aug 1944. 21p graphs, table (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Ionization 2. Gages, Ion 3. Title: Philips ionization gauge 4. Atomic power—Research 5. AECD 1867

PB 96402

DuPont de Nemours E. I., Co., Inc.

Chambers works process for the manufacture of fluorine cell electrolyte (KF-2.3 HF) at east area. May 1944. 4p tables (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

Describes procedure consisting of mixing anhydrous HF with KHF_2: specifications for process

materials and description of equipment; personnel hazards in handling mentioned. AECD 2320

PB 96429

Fassel, Velmer A. and Wilhelm, Harley A.

Quantitative spectrographic analysis of the rare earth elements. III. Determination of major constituents in complex mixtures. n.d. 8p graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Spectrographic methods applicable to the determination of major rare earth constituents in complex mixtures are described. The specific examples discussed are the determination of yttrium and gadolinium in the concentration range of 10 to 100 per cent. The procedures involve the high current DC are excitation of rare earth oxide sample-ceric oxide-graphite mixtures. Selected lines of cerium are used as internal standards. The choice of cerium as internal standard was based on the relative ease with which any cerium present in a mixture could be preferentially separated from the mixture and then reintroduced in a standard amount. Precision data indicate a standard deviation of about ±3 percent of the amount present. MDDC 1777

PB 96464

Gardner, Eugene and Lattes, C. M. G.

Production of mesons by the 184-inch Berkeley cyclotron. Mar 1948. 4p photos, drawings (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

We have observed tracks, which we believe to be due to mesons in photographic plates, placed near a target bombarded by 380 Mev alpha particles. For a 10-minute exposure in the cyclotron, about 50 meson tracks are found along the 3-inch edge of a photographic plate. The mass has been determined by measuring the bending in the magnetic field and the range in emulsion. From the first 50 meson tracks measured, we find a mass of 313 ± 16 electron masses. It is highly probable that these mesons are the heavy mesons described by Lattes, Occhialini, and Powell. AECD 1846

PB 96463

Gardner, Eugene

Stars in photographic emulsions initiated by alpha particles. Jun 1948. 6p photo, graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

The stars initiated in photographic emulsions by alpha particles are similar to those initiated by deuterons; however, in the case of the alpha-particle stars the tracks could be seen of the initiating particle, and hence an estimate of the cross section for the formation of stars was made available. AECD 2126

PB 96809

Guest, G. H.

Industrial uses of radioisotopes. Dec 1948. 26p Mi $2.00 Ph $3.75

This report discusses the use of radio isotopes in several fields of research, especially in fundamental chemistry. Essentially it consists of abstracts from Appendix I of the Fourth Semi-Annual Report of the U. S. Atomic Energy Commission. The abstracts briefly describe the use of isotopes by thirty U. S. industrial organizations including Allied Chemical & Dye Corp. New York, N. Y., Dow Chemical Co. Midland Mich, Eastman Kodak Corp. Rochester N. Y., B. F. Goodrich Co. Akron Ohio., Sinclair Refining Co. East Chicago, Ind., General Electric Co., Massachusetts Institute of Technology; General Foods Corp. Hoboken, N. J., Merck & Co. Rahway, N. J.,Etc. In addition, 37 possible uses of radioisotopes in industry are listed. The ideas have been collected from bulletins, reports, and scientific journals. NRCC AEP CRIB-399

PB 96471

Hughes, D. J.

Further measurements on polarized neutrons. Nov 1947. 4p (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Neutrons—Polarization 2. Neutrons—Measurements 3. Atomic power—Research 4. MDDC 1548

PB 96399

Inghram, Mark G. and others.

On the isotopic composition of meteoritic and terrestrial gallium. Apr 1948. 2p table (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

The abundances of the isotopes in a sample of gallium separated from a meteorite were found to be the same as in ordinary gallium within the experimental error. The ratio of the abundances of the isotope at mass 69 to the one at 71 was found to be 1.509 as compared with the normal 1.510. AECD 1974

PB 96403

Kahn, Milton

Preparation of thin U_3O_8 films. Apr 1943. 13p photos, drawings, graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Uranium oxides—Electrolysis 2. Atomic power—Research 3. MDDC 1605

PB 95364

Kasha, M.

Reactions between plutonium ions in perchloric acid solution: Rates, mechanisms, and equilibria. Aug 1946. 31p photos, graphs, tables Mi $2.25

Ph $6.25 (Limited supply mimeo $.15) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.15)

The reaction mechanism for the disproportionation of Pu(IV) to Pu(VI) and Pu(III) was tested in an experiment in which a mixture of Pu(IV) and Pu(VI) was diluted to yield a solution having a concentration of 1.73×10^{-3}M in plutonium and 0.481M in perchloric acid (no added salt). The data best fit a rate law in which the rate of disproportionation of Pu(IV) is proportional to the square of the Pu(IV) concentration for the forward reaction. The rate constant for this rate law is 3.2 liters $mole^{-1}$ $hour^{-1}$ at 25° C. The equilibria between Pu(III), Pu(IV), Pu(V), and Pu(VI) have been studied as a function of acidity, in perchloric acid solutions at an ionic strength of I, at 25° C. The reactions were carried out generally by mixing solutions of Pu(III) and Pu(VI) at the desired acidity, salt concentration and temperature. At low acidities (0.05M), this procedure permitted study of equilibria involving Pu(V) without the formation of colloidal Pu(IV), since Pu(IV) occurred in but relatively small amounts under such conditions. The equilibrium constant, $K_1 = \frac{[Pu(III)]\,[Pu(VI)]}{[Pu(IV)]\,[Pu(V)]}$, was found to be 7.4 and 10.7 for the 0.0520M and 0.1019M perchloric acid experiments (ionic strength = I) at 25° C. For a precise definition of an equilibrium involving Pu(V), an equilibrium constant not involving the concentration of Pu(IV) (in which there were large analytical uncertainties due to its small relative concentration) was calculated, $K_5 = \frac{[Pu(III)]\,[Pu(VI)]^2}{[Pu(V)]^3}$, giving values of 2.82 and 31.3 for the 0.0520M and 0.1019M perchloric acid experiments (ionic strength = I) at 25° C, indicating an inverse 3.6 power dependence on hydrogen ion concentration. The equilibrium between Pu(III), Pu(IV), and Pu(VI) is defined by the constant $K = \frac{[Pu(III)]^2\,[Pu(VI)]}{[Pu(IV)]^3}$, for which values of 252, 40.2, 0.195, and 0.0405 were obtained for experiments in 0.0520, 0.1019, 0.516, and 0.994M perchloric acid, respectively, all at an ionic strength of I and at 25° C. These data best fit a third power dependence on hydrogen ion concentration for the Pu(III)-Pu(IV)-Pu(VI) equilibrium constant. Since a fourth power dependence is expected on the basis of the presently accepted formulas for the plutonium ions, and since hydrolysis does not explain the dependence found, further work is required for an explanation of these results. A description is given of the criteria to be observed for the stabilization of maximum amounts of Pu(V) in equilibrium with other plutonium ions in aqueous solution at 25° C. These include (a) conducting the experiments at lowest permissible acidity, (b) having an average oxidation number of plutonium at slightly greater then +5, (c) starting the experiments by mixing solutions of Pu(III) and Pu(VI) so that the formation of colloidal Pu(IV) is forestalled by preventing the occurrence of large concentrations of Pu(IV) at low acidities. Calculations indicate that in IM perchloric acid Pu(V) can exist to the extent of 0.5 percent, while in 0.01M perchloric acid (at an ionic strength of I), over 60 percent of the plutonium will be in the form of stable Pu(V). Experimental application of these criteria and calculations lead to the preparation of solutions containing large amounts of Pu(V) in stable equilibrium with the other oxidation states of plutonium in aqueous solution at 25° C. The rate of reduction of plutonium in aqueous solution due to products of the plutonium alpha radiation was calculated from the change in average oxidation number of the plutonium in long term experiments. The mean rate of diminution in the average oxidation number of plutonium was found to be 0.0118 per day at 25° C, and independent of acidity over a range of from 0.1019M to 1.992M perchloric acid. The solubility product of $Pu(OH)_4$ was calculated from data on plutonium equilibrium experiments in 0.05M acid at 25° C, in which slow formation of colloidal Pu(IV) occurred during a 500-hour interval. Assuming that the system represents equilibrium between Pu^{+4}, OH^-, and $Pu(OH)_4$, a value of 7.1×10^{-56} is obtained for the solubility produce of Pu(IV) hydroxide. Absorption spectra of Pu(III) and Pu(VI) in perchloric acid (at an ionic strength of I) at 25° C are given, and a precision absorption cell assembly is described. MDDC 904

PB 96469

Katcoff, Seymour

Ranges in air and mass identification of plutonium fission fragments. Feb 1948. 11p drawing, tables, graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Determinations were made of the mean and extrapolated ranges in air of plutonium fission fragments for twenty individual masses between 83 and 157. Collimated fission fragments passing through air at 120 or 140 mm pressure were deposited, after being stopped by the air, on a series of 14 thin lacquer films. These were analyzed radiochemically for individual fission products. The corrected activities were plotted against distance traversed by the fragments, yielding differential range curves whose widths at half-maximum were 11.7 ± 1.3 percent, independent of fragment mass. The activities found beyond each distance were plotted against distance giving integral range curves. Mean and extrapolated ranges were derived from these activities. In the light group, the extrapolated ranges decrease from 2.90 cm (15° C and 760 mm) for mass 83 to 2.25 cm for mass 117; in the heavy group these ranges decrease from 2.25 cm for mass 127 to 1.95 cm for mass 157. From the range-mass curve drawn for well-known masses, definite assignments of 92, 93, and 132 were given to 3.5h Y, 10h Y, and 77h Te, respectively. Highly probable assignments

of 94 and 134 were given to 20m Y and 54m I, respectively. AECD 1874

PB 96465

Kimball, R. F.

Induction of mutations in paramecium aurelia by Beta radiation. n.d. 10p diagrs, graphs, table (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Animals of stock 90, variety I of Paramecium aurelia were exposed to doses ranging from 5,000 to 20,000 r.e.p. of beta radiation from radioactive phosphorus plaques and irradiated animals isolated. The doses used had no lethal effect upon the animals so long as they multiplied vegetatively. However, when their descendants were made homozygous by autogamy, a large fraction of the exautogamous clones were non-viable or poorly viable. MDDC 1550

PB 95693

Konopinski, E. J. and Teller, E.

Theoretical considerations concerning the D + D reactions. n.d. 21p graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Some possibilities are explored for the theoretical explanation of the angular distribution of D + D reaction products. The variation with energy is ascribed entirely to differences in the centrifugal barriers encountered by the bombarding particles responsible for the isotropic and non-isotropic components. The detailed data on the proton distributions at low energies appears to be explained in terms of an asymmetric part produced by P-waves superposed on isotropic emissions due to S-waves. However, ordinary extra-polation of this to higher energies gives much less symmetric distributions than experimentally found at such energies for the emission of neutrons. If the experiments are correct as interpreted, then they appear to show that spin-orbit coupling plays a large part in the reactions. In that case, an isotropic component produced by incoming P-waves grows in importance with energy and accounts for the increasingly parallel growth of the isotropic and asymmetric emissions. MDDC 1461

PB 96407

Lawrence, J. H.

Cobalt distribution. Progress report for August, 1947—Medical and health physics section. Part A. n.d. 4p tables (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Cobalt—Toxicity 2. Atomic power—Research 3. MDDC 1597

PB 96421

Leifer, Edgar and others.

Utilization of nicotinic acid and its amide by the human erythrocyte in vitro. n.d. 5p graphs, table (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Erythrocytes—Nicotinic acid 2. Nicotinic acid 3. Atomic power—Research 4. MDDC 1680 5. MDDC LADC 486

PB 96397

Levy, Henri A.

Remodeling a laboratory for radiochemical instruction or research. n.d. 6p drawings, table (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Radiochemical laboratories 2. Atomic power—Research 3. AECD 1858

PB 96452

Lewis, Lloyd G. and Hayden, Richard J.

Mass spectrograph for radioactive isotopes. Sep 1947. 12p (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

The construction of a 60° mass spectrograph for the identification of the masses of active isotopes is described. Methods of analysis with this spectrograph are given. Mass analyses of 55-day strontium, of 40-hour lanthanum, and of a mixture of fission products in the rare-earth range are described. MDDC 1556

PB 96453

Mack, Dick

Functional description of the 184-inch cyclotron pulsed arc system and maintenance instructions. n.d. 14p drawings, graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Cyclotrons 2. Atomic power—Research 3. AECD 1849

PB 96412

McKibben, J. L.

Plan of 12 Mev electrostatic accelerator under construction at Los Alamos. n.d. 9p photo, drawings (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Plans of the 12 Mev electrostatic accelerator under construction at Los Alamos are discussed. Some of the novel features of this machine are its use of a gas tight separation column around the charging belt and accelerating tube, use of capacitor liner of the tank for precision voltage control, use of a pivoted 90 degree deflecting magnet to bend the vertical beam horizontally, and ample space for clean neutron experiments. AECD 2038

PB 96478

McMillan, Edwin M. and Sewell, Duane C.

Diffraction effects in neutron attenuation measurements. Nov 1947. 4p diagrs (Limited

supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

All errors due to diffraction effects in a neutron attentuation experiments are computed. Also a special experiment to measure the forward intensity of diffracted neutrons from lead and copper is described, and the results given. These agree with the theoretical values. MDDC 1558

PB 96462

Motta, E. E. and Boyd, G. E.

Production of new Tc activities from separated Mo isotopes. Apr 1948. 6p graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Molybdenum—Isotopes 2. Masurium—Energy measurements 3. Deuterons—Bombardment 4. Elements—Analysis 5. Atomic power—Research 6. AECD 1994

PB 96468

Mullaney, J. F. and others.

Excitation time of silver-activated zinc sulphide on electron bombardment. Mar 1948. 1p (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Zinc sulfide 2. Electrons—Acceleration 3. Atomic power—Research 4. AECD 2041

PB 96391

Myers, V. and Wattenberg A.

Cross-over transitions in Cl^{38}, Co^{60}, Br^{82}, and Sb^{124}. Jul 1948. 3p tables (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

Describes an attempt to investigate the frequency of occurence of the single step process from the initial to the final state; detection of the gamma rays was accomplished by means of photodisintegration of Be-9 and D-2 with subsequent release of photoneutrons. AECD 2264

PB 96451

Patten, R. B.

High-voltage, pulse-type, radio-frequency power supply. Oct 1946. 7p photos, drawings, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

A lightweight portable power supply, using subminiature tubes, capable of supplying up to 1100 volts at one-half a microampere drain, has been designed. The input is 90 volts at less than 200 microamperes. The weight, excluding the batteries is 140 grams. With the batteries, the total weight is 300 grams. Diagrams and photographs are included. AECD 2145

—62288

PB 96409

Prescott, C. H., Jr.

Higher chlorides of uranium. Dec 1947. 3p table (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

Besides the valence state of 3 which uranium exhibits in common with other elements of the actinide and lanthanide series, the more common valence states of uranium are 4 and 6. With chlorine, besides UCl_3, UCl_4, UCl_5, and UCl_6 are formed. UCl_4 is the most stable, while UCl_6 evolves Cl_2 starting slowly about 100° C. UCl_5 disproportionates in vacuo into UCl_4 and UCl_6 with volatilization of UCl_6 above 150° C. UCl_6, hitherto unknown, was discovered in attempts to purify UCl_5 by vacuum sublimation. All the chlorides are stable in dry air but hydrolyze upon access of moisture, UCl_6 being highly reactive. Uranium oxides may be chlorinated with a variety of reagents, some in the vapor phase as described later. Liquid phase chlorination of UO_3, U_3O_8, or mixtures of UO_3 and UO_2 in 2:1 ratio yields the product UCl_5. MDDC 1710

PB 95796

Redman, C. and Saxon, D.

Investigation of the delayed neutron decay curves resulting from uranium and plutonium fission. Nov 1944. 14p drawings, graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

Employing the graphite pile at Argonne samples of Pu^{239} and enriches U^{235} were irradiated, and the decay curves resulting from delayed neutrons emitted in the fission process were analyzed. Appropriate intensities and lengths of irradiation were used to best resolve the various delayed neutron periods. To obtain the shortest periods a mechanism was built that would transfer the sample from a pile to a BF_3 proportional counter geometry in less than one second. The decay curves were recorded on a magnetic wire recorder. Analysis of the decay curves, 18 successful runs on Pu^{239} and 37 for U^{235}, show that they are best fitted by the formulae:

$A_t = C_{Pu}(1.2e^{-0.660t} + 1.1e^{-0.154t} + 1.0e^{-0.0310t} + 0.11e^{-0.0126t})$ for Pu^{239} and for U^{235} - $A_t = C_u(1.65e^{-0.613t} + 1.36e^{-0.156t} + 1.00e^{-0.0308t} + 0.15e^{-0.0126t})$.

Within the limits of experimental error, the half-lives for Pu^{239} and U^{235} are identical, namely 55.0 seconds, 22.5 seconds, 4.4 seconds and 1.1 seconds, and the yields of the two longer periods are those expected from the predicted fission yields of the various isotopes. MDDC 1607

PB 96477

Reed, Sherman A. and Banks, Charles V.

Determination of palladium and nickel with alpha-furildioxime. n.d. 8p tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. α-Furildioxime 2. Palladium—Determination 3. Nickel—Determination 4. Atomic power—Research 5. AECD 1819

PB 95809

Rush, J. H.

Range of RA - α - BE neutrons in water. Jun 1945. 10p photos, graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn., Mimeo: $.10)

Radial distributions of Ra - α - Be neutrons about an approximate point source in water were determined by means of indium foil activations. Values for migration area (M^2) derived from the data are: For all activating neutrons, 54.7 cm^2; for indium resonance neutrons, 45.4 cm^2. MDDC 1050

PB 96393

Saxon, D.

Beta spectrum of $Hg^{203,205}$. May 1948. 3p graphs (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

The long-lived $Hg^{203,205}$ activity has been measured with the 180° beta spectrometer. A comparison of the results of this study with those obtained previously is made. Sources are described. AECD 2121

PB 96454

Saxon, D.

Beta-spectrum of Os^{193}. Mar 1948. 5p graphs (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

1. Osmium—Spectrum analysis 2. Beta rays—Spectrum analysis 3. Atomic power—Research 4. AECD 1860

PB 96410

Siri, William

Mass spectroscope for rapid analysis in low mass range. Jan 1947. 2p (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Spectroscopes 2. Atomic power—Research 3. MDDC 789

PB 96395

Sirota, Julius

Determination of p-Toluenesulfonamide. n.d. 2p drawing (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. p-Toluenesulfonamide—Determination 2. Atomic power—Research 3. MDDC 1714

PB 96466

Smith, Lloyd

Physical considerations concerning the design of the bevatron. Jun 1948. 14p drawings, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

The principles of the bevatron are discussed; a cycle of operation of an ideal machine is traced in some detail; the bevatron is a magnetic resonance accelerator for producing protons of energies up to 10 Bev; various factors in the construction of a bevatron discussed. AECD 2200

PB 96405

Sugarman, Nathan.

Amendments to paper on short-lived halogen fission products. Jan 1948. 10p graphs, tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

1. Halogen compounds—Fission products 2. Atomic power—Research 3. AECD 1873

PB 96376

Sugarman, Nathan

Short-lived halogen fission products. Nov 1947. 34p graphs, tables (Limited supply mimeo $.20) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.20)

Half-life values have been determined for some short-lived Br and I fission products. The half-lives found for Br^{87} and Br^{88} by extraction of the Kr daughter activities were 56 sec. and 16 sec. respectively, on the basis of a 3.0-min. half-life for Br^{85}. Attempts to measure the half-lives of Br^{89} and Br^{91} by extraction of the descendant Sr activity were unsuccessful because of the absence of activity. The identity in half-lives of Br^{87} and the 55.6-sec. Br delayed neutron emitter makes it probable that the mass assignment of the delayed neutron emitter is 87. The half-life of I^{137} was found to be 19 ±2 sec. by extraction of Xe^{137}, on the assumption of constant chemical yield of the Xe extraction. The half-life of I^{137} found by comparison of the activity of Xe^{137} with that of Xe^{138} depends strongly on the half-life of I^{138} which is known only roughly to data as 6 sec. Extractions of Ba^{139} led to determination of the half-life of I^{139} as 2.6 sec. The absence of Ba^{140} activity in AgI precipitates made it impossible to determine the half-life of I^{140}. Because of the agreement in half-lives of I^{137} and the 22.0-sec. I delayed neutron emitter it is probable that the two are identical. MDDC 1566

PB 96467

Steinberg, Ellis P. and others.

Fission yields in uranium 233. Nov 1947. 11p drawing, graphs, table (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

A survey of the radiochemical method for the determination of fission yields is presented. The yield-mass spectrum resulting from the slow neutron fission of uranium 233 is reported and the data are compared with similar spectra of uranium 235 and plutonium 239. MDDC 1632

PB 96470

Sterett, C. C. and Calkins, V. P.

Ionic absorption spectra of the uranium halides in a polar, non-aqueous solvent. Apr 1947. 13p graphs (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

The absorption spectra of various uranium halides have been measured in methyl acetate, the following halides of uranium being used: the trichloride, tribromide, tetrachloride, tetrabromide, monobromotrichloride, pentachloride, hexachloride, tetravelent oxychloride and the hexavalent oxychloride. All these halides but the tetravalent oxychloride were found to be soluble in methyl acetate. Only two distinct spectra were exhibited by these halides. The uranyl chloride gave an absorption spectra characteristic of the uranyl ion whereas all the other soluble halides gave an absorption spectra characteristic of the tetravalent uranium ion. Mechanisms for these reactions have been proposed. MDDC 1473

PB 96375

Yankwich, Peter E. and Weigl, John.

Relation of backscattering to self-absorption. Jan 1948. 4p graph, table (Limited supply mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.05)

The effects of backscattering upon self-absorption correction curves are demonstrated. Data are given for the backscattering powers of several substances for the beta radiations from C^{14}, and for self-absorption of samples of barium carbonate and wax, containing C^{14}, mounted on aluminum. MDDC 1739

PB 96394

Zachariasen, W. H.

New crystal structure results. Part I. Apr 1948. 9p tables (Limited supply mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo: $.10)

This paper gives brief descriptions of the complete crystal structures of sixty-two different compounds corresponding to eighteen new structure types. The information given about the various structures includes the unit cell dimensions, the number of stoichiometric molecules per unit cell (n), the space group, the atomic positions and the interatomic distances. AECD 2093

PHYSIOLOGY

PB 95904

Gamble, James L. and others.

Physiological changes during negative acceleration. Jul 1948. 20p illus, graphs Mi $1.75 Ph $2.50

1. Brain hemorrhage 2. Acceleration—Physiological effects 3. Pilots, Air—Medical examinations 4. AAF TSEAA MR 696-74L

PB 95901

Jacobs, Harold and others.

The effect of pressure breathing on circulating blood volume—distention of the venous reservoirs. Oct 1948. 14p tables, drawings Mi $1.75 Ph $2.50

1. Blood pressure, Venous 2. Respiration—Research 3. Respiration—High altitude 4. AAF TSEAA MR 696-104K

PRINTING, PUBLISHING AND ALLIED INDUSTRIES

PB 94952

British Intelligence Objectives Sub-Committee.

Dutch report on German manufacture of scales on metal, glass and celluloid. Aug 1948. 15p Mi $1.75 Ph $2.50

1. Lithography—Germany 2. Etching—Germany 3. BIOS M 101

PB 95484

Maschinenfabrik Johannisberg, Geisenheim, Ger.

Ferro-prints and a trade pamphlet relating to printing machines. 1935-1942. 102f (Text in German) Mi $4.50 Enl Pr $15.00

See PB 95484s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Printing machinery—Germany 2. Micro BIOS FD 3126/47, Frames 1-16

PB 85298

U. S. Army Air Forces.

Set: Design, packaging, ground communications. Feb 1947. 2p table Mi $1.25 Ph $1.25

1. Mechanical drawing—Equipment 2. AAF TO 00-30-958

PB 85297

U. S. Army Air Forces.

Set: Drafting technical data, ground communications. Feb 1947. 3p tables Mi $1.25 Ph $1.25

1. Mechanical drawing—Equipment 2. AAF TO 00-30-956

PSYCHOLOGY

PB 96583

Adolph, Edward F. and others.

A study of temperature regulation, heat exchange, and tolerance of man and warm blooded animals on exposure to cold. Nov 1948. 105p graphs, tables Mi $4.50 Ph $13.75

Pt. 1. Effects of cold on infant rats: Body temperature, oxygen consumption, electrocardigram: by Janet Fairfield: Pt. 2. Tolerance to cold and anoxia in infant rats by E. F. Adolf: Pt. 3. Lethal limits of cold immersion in adult rats, by E. F. Adolph: Pt. 4. Acute hypothermia in guineau pigs by R. E. Gosselin. AAF TSEAA MR 696-113C

STRUCTURAL ENGINEERING, INCLUDING BUILDING MATERIALS

PB 96679

Brittons, Ralph R.

Condensation in walls and roofs. Technical paper number eight. Apr 1948. 21p maps tables Mi $2.00 Ph $3.75 Also available from U. S. Housing and Home Finance Agency, Washington, D. C.

This is a progress report (Fourth) on the third test program of the Housing and Home Finance Agency as conducted in the climatometer of the Pennsylvania State College Engineering Experiment Station at State College, Pa. The report covers the testing of 14 wall panels (10 conventional wood frame and 4 steel). The panels were set up around the edge of a conventional wood frame floor about 14' x 17' plan size. The floor contained 2-inch mineral wool insulation to save heat since the cold air in the Climatometer circulated below it. An insulated flat roof completed the enclosure. See PB 96675. HHFA TP 8

PB 96043

Bürnheim (Dr.)

Fatigue endurance of steel/plywood bondings. Nov 1944. 4p graphs Mi $1.25 Ph $1.25

1. Aircraft—Bonding—Germany 2. Gr. Brit. Ministry of Supply 3. RTP/TIBT, translation 4. Micro GDC 16/428T, translation

PB 96088

Conley, John E. and others.

Production of lightweight concrete aggregates from clays, shales, slates, and other materials. Nov 1948. 121p illus, tables, graphs Available free from U. S. Bureau of Mines, Publications Distribution Section, 4800 Forbes Street, Pittsburgh 13, Pa.

1. Concrete—Production 2. Aggregates, Lightweight 3. Concrete aggregates 4. U. S. Bureau of Mines.

—82288

PB 96279

Deutsche bauzeitung. (German architectural journal). v. 74, Nos. 1-72. 1940. v. 75, Nos. 1-25. 1941. 741f (Text in German) Mi $9.00 Enl Pr $96.25

1. Architecture—Periodicals—Germany 2. Micro FIAT E 104, Frames 2127-2862

PB 96304

Deutsche bauzeitung. (German architectural journal). v. 75, Nos. 28-53. Jul-Dec 1941. v. 76, Nos. 1-26. 1942. 694f (Text in German) Mi $9.00 Enl Pr $90.00

1. Architecture—Periodicals—Germany 2. Micro FIAT E 105, Frames 2863-3557

PB 96756

Kondo, Kazuo

On the buckling of thin plates and shells. Sep 1942. 5p Mi $1.25 Ph $1.25

Reprinted from the Journal of Engineering Kyushu Imperial University, Vol. 17, no. 2, September, 1942

1. Shells, (Aircraft)—Buckling—Japan 2. Plates—Buckling—Japan

PB 97285

McCullough, Helen E.

Cabinet space for the kitchen. University of Illinois Bulletin. Circular series no. C 5.31. Feb 1949. 10p photos, drawings (Also available from the Small Homes Council, University of Illinois, Urbana, Illinois, $.10). Thereafter Mi $1.25 Ph $1.25

This circular presents the results of a study of cabinet space requirements for kitchens using factory-made cabinets. The study was part of a cooperative investigation conducted by the Small Homes Council and the Agricultural Experiment Station. The objective of which was "to determine acceptable planning standards for kitchen and laundry facilities located on the same floor level of the small or moderate-cost house". The project included studies of both "ample" and "minimum" space.

PB 96631

Ödman, Sven T. A.

Differentialekvation för beräkning av bärande konstruktioners svängningar till följd av åkande laster. (Differential equation for calculation of vibrations produced in load-bearing structures by moving loads). Sep 1948. 12p Mi $1.75 Ph $2.50

Reprint from Preliminary Publication. International Association for bridge and structural engineering. Third Congress. Liege 13-18 September 1948

Summary in French, German and English.

Title in Swedish, French, German and English

Svenska. Forskningsinstitutet för Cement och Betong vid Kungl. Techniska Högskolan i Stockholm. Meddelanden 14

The deformations and stresses produced in load-bearing structures by one or several moving loads can be calculated theoretically, even in the case of relatively complicated structures. In contradistinction from previous investigations, the present paper deals with this problem in a more general manner with the help of characteristic functions, so that the differential equation deduced in the paper holds good for any arbitrary boundary conditions and for several non-elastic moving loads, possibly acting in conjunction with other forces devoid of mass. The variation in the form of the natural vibration with the position of the load is also taken into account. An approximate solution of the differential equation is presented. Other methods for studying the problem are discussed.

PB 96872

Tengvik, Nils.

Building research in Sweden. A brief survey. Apr 1948. 8p Mi $1.25 Ph $1.25

1. Building research—Sweden 2. Svenska. Statens Kommitté för Byggnadsforskning Institutet

PB 96365

Thompson, J. Neils and Ramey, W. D.

Investigation of reinforced joistile-concrete beams. May 1948. 51p photos, drawings, graphs, tables Mimeo: $1.50

1. Beams, Reinforced concrete—Impact tests 2. Texas. University 3. OTS IRDD Proj Contract Cac-47-5

PB 96687

U. S. Housing and Home Finance Agency.

HHFA technical bulletin no. 5: Fuel consumption in the home, by Laurence Shuman: Basements vs no basements, pt. 3: Water penetration and vapor permeability of sheet materials as related to condensation control in dwelling construction: Small scale manufacture from wood wastes. Jul 1948. 67p drawings, tables Mi $3.00 Ph $8.75 Also available from U. S. Housing and Home Finance Agency, Washington, D. C.

1. Basements 2. Condensation—Buildings 3. Fuel consumption 4. HHFA TB 5

PB 96692

U. S. Housing and Home Finance Agency.

Manual on wood construction for prefabricated houses. Dec 1947. 330p photos, diagrs, drawing, graphs, maps, tables Also available from U. S. Housing and Home Finance Agency, Washington, D. C. Mi $41.25 Ph $9.00

This manual has been prepared by the Forest Products Laboratory, U. S. Dept. of Agriculture in collaboration with the technical staff of the Housing and Home Finance Agency, to assist prefabricators in the more efficient utilization of lumber, plywood, and related materials. Its purpose is to facilitate production of durable permanent housing. The manual provides a basic source of scientific and engineering information about wood and wood-base materials needed to expand the Nations' facilities for the production of adequate, safe, and economical housing through the medium of factory fabrication. Various methods of prefabrication are described, both to facilitate the application of this information and to present to the industry an analytical review of current processes and techniques. Results of a survey of prefabrication plants in the East, Middle West, and Pacific Coast by staff members of the Forest Products Laboratory have been utilized extensively in the planning and preparation of this manual. While the manual has been prepared specifically for use by prefabricators, much of the information contained therein is applicable to all types of housing, whether factory or site fabricated. The general information presented about properties of wood, plywood, and other materials as well as that on lumber grading, preservative treatment, seasoning, storage, painting, insulation, glues, and fastenings, will find application regardless of the type of construction employed. The design and use recommendations given are, however, specifically intended for prefabrication.

PB 96690

U. S. Housing and Home Finance Agency.

Performance standards, structural and insulation requirements for houses. Jun 1947. 12p map, table Mi $1.75 Ph $2.50 Also available from U. S. Housing and Home Finance Agency, Washington, D. C.

This report which sets forth standards for structural and insulation requirements for houses, will serve as a guide in the modernization of building codes and will assist manufacturers and builders in the development of sound new building techniques. It supplements BMS 107. Building Code Requirements for New Dwelling Construction, recommended by the National Housing Agency and prepared in consultation with the National Bureau of Standards, issued Jan 1, 1947. More particularly, the report supplements Section 102, "Materials and Methods not Specifically Authorized" by providing a "yardstick" for evaluating such materials and methods on a uniform basis.

PB 96673

U. S. Housing and Home Finance Agency.

Technique of house nailing. Nov 1947. 58p drawings Available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. $.20

The purpose of this publication is to set up a general specification for nailing, which it is hoped will help to replace haphazard nailing practices with sound and efficient ones in house construction. The information is intended as a guide

for engineers, architects, carpenters, and prospective home owners. The publication does not favor any particular design of framing, but merely refers to acceptable practice in assembling and arranging parts in any structurally well-designed frame house of the balloon, platform, or other type. It limits nailing instructions largely to structural details necessary for rigidity and strength without considering trim or decorative parts.

PB 96691

U. S. Office of the Housing Expediter.

Lightweight aggregates for concrete. (A survey). Feb 1947. 24p maps, tables Mi $2.00 Ph $3.75 Also available from U. S. Housing and Home Finance Agency, Washington, D. C.

This pamphlet was prepared in view of the need for considerable work in the concrete house field and for a nationwide survey of lightweight aggregate. The object was to gather specific reliable information on the newer and tested materials, to place this information in concise form, and distribute it widely to the construction industry. Six types of aggregate were selected for the survey. They are expanded shale or clay (Haydite), expanded slag, pumice, diatomite, perlite and vernuculite. All the information contained in this pamphlet was supplied by producers.

PB 96284

Zement. (Cement). v. 28, Nos. 1-52. Jan-Dec 1939. v. 29, Nos. 1-52. Jan-Dec 1940. 713f (Text in German) Mi $9.00 Enl Pr $93.75

1. Cement—Periodicals—Germany 2. Micro FIAT K 80, Frames 3587-4300

TEXTILES AND TEXTILE PRODUCTS

PB 96585

Corry, William A.

Nylon—rayon fabric. Oct 1948. 2p table Mi $1.25 Ph $1.25

1. Cloth, Nylon—Rayon 2. AAF TSEAA MR 666-4

PB 96089

Gr. Brit. Dept. of Scientific and Industrial Research.

Flax retting with aeration. (A process of reusing an industrial waste water). 1948. 146p tables, diagrs Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.00

1. Water—Pollution—Gt. Britain 2. Flax—Preparation—Gt. Britain 3. Flax—Retting 4. BSIR WPR, technical paper-10

PB 95855

Hultin, Sven and others.

Svenska Textilforskningsinstitutet, Redogörelse för tillkomst. 1946. 47p illus, drawings Mi $2.50 Ph $6.25

Summary in English

Svenska Textilforsknings-institutet, Gothenberg. Meddelanden No. 1

The institute has come into existence through cooperation between the Swedish Government and the Swedish textile and clothing industries. Recommendations for the creation of such an institute were made in February 1943 by a Royal Commission, inquiring into the development of technical scientific research, under the chairmanship of Gösta Malm, Esq., formerly President of the Royal Swedish Hydro-Electric Power Board. Enthusiastic and intensive work for the realization of the institute had been done even earlier by several interested personages in the textile industry. Alex. Engblom, Esq., technical director of the Boras Wäfveri AB., acted as consultant expert. The building of the institute was voted by the Swedish Parliament in the 1943 session. The Government granted 700.000 crowns for the buildings, and the textile and clothing industries granted 750.000 crowns for equipment through the Swedish Textile Research Foundation. Current expenses are met partly by Government grants, partly by grants from the Foundation. The work on the institute buildings was begun in June 1944 and was practically finished by June 1945. The production and erection of the equipment was sensibly retarded by the strike in the metallurgical and engineering industries, which lasted for five months during 1945. The director of the institute, Dr. Nils Grålen, Reader in Textile Chemistry at the Chalmers University of Technology, Gothenburg, describes in an article the aims of the institute. The by-laws of the institute declare that the object of the institute is to prosecute and promote technical scientific research, to study the progress in those fields of research which are connected with textile products, their manufacture and use, and also to assist in the training of technicians and research workers in this field. First and foremost among the purposes of the institute stands research. It has been considered of primary importance that the institute should be neither merely a central works laboratory for solving temporary difficulties in manufacture, nor a purely theoretical institution for the furtherance of science without contact with industrial progress. Rather, the work must be conducted in such a way that the results of theoretical research through application to definite industrial problems may reach concrete results for the benefit of the consumer. The most important object of investigation will be the fibers, the raw material of textiles. The investigation of fiber structure will be done, according to modern methods, and include wool, cotton, linen and allied fibers, as well as artificial fibers of various types. The textile treatment processes are a wide field of especially chemical research. Closely connected with these are the problems of the textile auxiliary products and, further, of the synthetic plastics which have lately shown themselves essential for obtaining various desirable qualities of the textiles, for

instance in anti-crease treatment, for obtaining a soft and pleasant feel, insulation for heat and resistance to wetting. The above-mentioned problems are chiefly of a chemical nature and refer primarily to the high-molecular chemical compounds. The Institute for Textile Research will therefore largely be occupied with the physics and chemistry of the high-molecular compounds. But at the same time we intend also to investigate the mechanical problems of the textile industry, e.g., the importance of the fiber friction and the fiber adhesion for spinning. An important question, and one which is placed high up on the list of projected investigations, is this: what qualities are desirable in the cloth in order to give it a maximum of suitability for garments, and, is it possible to estimate the qualities of the cloth from those of the fiber? In this connection we have also to elaborate methods for testing textiles with regard to their practical serviceableness. Besides research the institute will assist in the training of technicians and research workers in the field of textiles by putting premises and teaching staff at the disposal of the Chalmers University of Technology. The architect, professor M. Wernstedt, writes about the institute buildings. The edifice is of great depth and built in two stories. On the first floor the rooms have top light, on the ground floor several rooms have artificial light only. The latter are particularly suitable for physical measurements, which consequently are protected from interferences from the exterior walls, such as sunlight, heat radiation, etc. Storage spaces are also dark. The use of sky-lights in the upper story, i.e., in the laboratories for chemistry, textile chemistry, textile mechanics and for clothing technology, has the great advantage that large wall spaces are free for instruments, that the illumination is equally satisfactory in day-time and when artificial light is used, and, further, that auxiliary spaces such as fume laboratories, balance rooms, storage rooms, etc., can all be placed at the outer wall of the principal laboratory. Main thoroughfares, e.g., corridors, occupy a comparatively small area, as the building is very deep. Certain rooms have been equipped for constant temperature and constant humidity. Conduits and pipe-lines are suspended from the ceilings in the corridors, and below them are placed removable asbesto-tile boards on steel supports sunk in the brickwork. In the laboratories all conduits are placed on brackets on the walls. On the walls are placed 20 cms. wide laboratory shelves at table height, the tables are movable and placed against these shelves. The fume chambers have bases of black granite, they are evacuated through horizontal slits in the back, both at bench level and high up. Details of the buildings and equipment are shown in the illustrations. Finally, Dr. Gralen gives an account of the equipment. In the first place there is the usual chemical laboratory equipment, and further there are optical instruments, for instance microscopes, photometers, colorimeters, spectrographs, refractometers. An X-ray apparatus for molecular structure measurements is projected. For the investigation of high-molecular compounds there is an ultracentrifuge which is driven by high-pressure oil turbines and which has a maximum centrifugal force 300.000 times gravity. Further, there is a smaller equilibrium ultracentrifuge with motor drive, and a diffusion apparatus with several cells. An electron microscope is projected, but has not yet been obtained. There are several machines for testing textiles with regard to tensile strength, heat conductivity, permeability for air and water vapor, and so on. For chemical textile tests on a semi-industrial scale we have a small kier for bleaching, a dyeing jigger, two winch dyeing machines, a universal dyeing machine for yarns and an experimental printing machine. There is also a small laundry with a washing machine, a washing centrifuge and a steam mangle. The metal workshop has two lathes, a milling-cutter, a couple of drilling machines, besides bench tools, grinding tools, etc. The library of the institute is particularly concerned with the technology of textiles. It is a subscriber to 20 textile journals. The preliminary discussions about the creation of the institute as well as later negotiations have all been marked by a common effort to reach the best possible result. It is our earnest hope that this will to joint and common endeavor shall stamp the future work at the Swedish Institute for Textile Research also, and that the work which shall be done there will be of service to our country and give prosperity to the industries who have joined with the Swedish Government in a common cause for future weal.

PB 70419s2

I. G. Farbenindustrie A. G., Bobingen, Ger.
Production of synthetic fibres (Perlon, etc.).
Abstract. n.d. 3p Mi $1.25 Ph $1.25
Abstract of Micro FIAT E 16, Frames 1-165 (PB 70419)
I. Micro FIAT E 16, Frames 1-165, abstracts

PB 70418s2

I. G. Farbenindustrie A. G.
Synthetic fibre production. Abstract. 1939-1944. 9p Mi $1.25 Ph $1.25
Abstract of Micro FIAT E 15, Frames 1-834 (PB 70418)
I. Micro FIAT E 15, Frames 1-834, abstracts

PB 70054s2

I. G. Farbenindustrie A. G., Wolfen, Ger.
Viscose manufacture. Abstract. 1936-1944.
8p Mi $1.25 Ph $1.25
Supplement 2 to PB 70054
I. Micro FIAT D-13, Frames 1-954, abstract

TRANSPORTATION EQUIPMENT

Aeronautics

Aircraft

PB 36502t

Albring, W.

Die übertragbarkeit von windkanalergebnissen an drehkorpern auf die verhaltnisse der grossausfuhrung. (The applicability of the results of wind tunnel measurements on solids of revolution to full-scale conditions). Oct 1944. 35p diagrs, table Mi $2.25 Ph $5.00

Translation of PB 36502

Legends in German

A description is given of experimental investigations carried out for the purpose of establishing limits to the applicability of the results of wind tunnel measurements to full-scale conditions. A law of similitude is found empirically. The character of the boundary layer is regarded as the decisive effect which, in the range of small Reynolds numbers, may be conducive to deviations from the configuration of flow under full-scale conditions. The accuracy of the measurement values is discussed. Measurements obtained earlier by the author on the model of the marine torpedo G.7 [3] are used as an example. When the model tests are carried out in air, whereas the full-scale body operates in water, investigations must be made to ascertain whether the local negative pressures on the body and control unit in the wind tunnel do not assume values, with which, in water the production of cavitation would enter into account. With the onset of cavitation, considerable deviations from the characteristics determined in the wind tunnel may appear. For this purpose, model measurements of the pressure distribution on the body and tail unit of the marine torpedo G.7 were carried out [22, 23]. The results are briefly reviewed here. ZWB FB 1982

PB 95831

Barker, Edward D.

Field test of casualty camp, arctic aerial delivery. Oct 1948. 18p illus Mi $1.75 Ph $2.50

1. Kits, Aircraft—Survival—Alaska 2. AAF TSEAA MR 670-211

PB 37575t

Beck, E.

Tafeln zur bestimmung des abfaugbogens beim Landen. (Tables for the determination of the levelling-out (hold-off curve in landing). Dec 1943. 66p diagrs Mi $3.00 Ph $8.75

Translation of PB 37575

Legends in German

These tables contain, in non-dimensional representation, levelling-out curves for an aircraft landing at constant lift coefficient, the respective time-paths of the velocity vectors, the occurring load factors and the course of sinking speed against altitude. Parameter of the traced curve families is the lift-drag ratio ϵ; in addition, the ratio

$$\frac{\text{horizontal levelling-out speed}}{\text{landing speed}}$$

(excess speed in landing) varies. For the case where the aircraft comes out of the hold-off horizontally above the ground without excess speed, the appropriate tables for the associated movement are also included. The use of the tables is explained by means of examples. The graphico-numerical method on which the tables are based will be briefly described. Approximation formulae are also suggested, and their suitability checked by examples. ZWB FB 1930, translation

PB 96882

Berry, Secrest L.

Operational suitability test of cleaner, vacuum electric, portable, type C-1. Jan 1949. 38p photos, diagr Mi $2.25 Ph $5.00

The report covers tests to determine the suitability of the C-1 vacuum cleaner for USAF utilization for cleaning of aircraft and maintenance shops. Photographs are included. APGC Proj. 34859-5

PB 96050

Blohm and Voss, K. G., Hamburg, Ger.

Flying tests of the BV.222V1 flying boat. Part 1. Mar 1941. 109p drawings, graphs Mi $4.50 Ph $13.75

The present report contains all essential experiences and observations gained in flying tests to date. In particular flight measurements of performance, longitudinal stability, and cooling efficiency are reported and discussed. A detailed examination of properties could not as yet be undertaken, however the flight characteristics, insofar as they were observable within the scope of tests carried out to date, are presented in this report. The appendix contains a table of flight performances determined from flight measurements. Micro GDC 23/64T, translation

PB 96062

Braun (Herr)

Wahl der gunstigketen vorflugellage. (The choice of the most suitable position for leading edge slats). Jan 1942. 11p diagrs Mi $1.75 Ph $2.50

Legends in German

The following report considers the most suitable position of the leading edge slats with reference to the chord of the slat, the width of the slot, the position in front of, and the position below the wing, and the thickness of the slat. Micro GDC 15/141T, translation

PB 96060

Brennecke (Herr) and Keydell (Herr)

Messungen an einem rollwinkelunempfindlichen fluggerat gerat RI. (Measurements on a symmetrically balanced flying body RI). Dec 1944. 24p diagrs, table Mi $2.00 Ph $3.75

Diagrams may not reproduce well

Legends in German

The R. I. model submitted to us was tested in the free flow of 2.25 m diameter at V=40 m/s flow velocity at different rolling angles. The flying body, symmetrical as to rotation, with 6-winged supporting area was fitted with a forwardly situated 4-winged control unit. Six component measurements were carried out at all model conditions, in part also without control unit. ZWB UM 3196, translation

PB 95900

Bright, Norman.

Field test of mattress, Arctic emergency, experimental and mattress, pneumatic, type A-3. Sep 1948. 27p illus. Mi $2.00 Ph $3.75

1. Mattresses 2. AAF TSEAA MR 670-21J

PB 95837

Bright, Norman.

Water drop test of kit, emergency rescue, arctic sled, 2-man. Sep 1948. 13p Mi $1.75 Ph $2.50

1. Kits, Aircraft—Survival—Alaska 2. AAF TSEAA MR 670-21K

PB 96243

British Intelligence Objectives Sub-Committee Halstead Exploiting Centre.

Works on operational stations: Airfields. Apr 1944. 10p tables Mi $1.25 Ph $1.25

1. Airplanes—Launching—Germany 2. BIOS HEC 234

PB 95256

Cameron, D. and Annand, W. J. D.

Measurements of cabin noise in bomber aircraft. Jan 1942. 20p illus, graphs, drawings, tables Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.30

Curves of noise level in decibels against frequency have been obtained for eight aeroplanes, in various flight conditions, at different crew stations, and on one aeroplane with and without soundproofing. These curves have been examined in conjunction with details of the geometry of the aeroplanes, the frequencies of airscrew and engine rotation and of the engine explosions, and assessments of the aeroplane noise made by pilots and observers. The principal sources of noise are airscrew rotation and engine exhaust at low frequencies and aerodynamic noise at high frequencies; in certain cases, other factors such as airscrew torsional vibration and engine vibrations appear to contribute. The noise level to be expected can be predicted roughly from a consideration of the distance of the crew stations from exhausts and airscrews, the area of perspex present, the aerodynamic cleanness of the windscreen and the degree of soundproofing. The curve of noise level against frequency does not in all cases agree with an assessment by the crew, and it appears that some other measurement is necessary to complete the picture. It is suggested that a more complete determination of the noise characteristics would be given by a combination of three tests—frequency analysis, a measurement of peak values, and an aural investigation of rattles, etc. The introduction of some degree of soundproofing is considered to be desirable in the majority of British bombers. The material used must not interfere with maintenance by making pipelines, etc., inaccessible, and it is for consideration whether some local thickening of the fuselage skin and windows in the plane of the airscrews would not be of advantage in reducing the amount of internal material required. Care should be taken to eliminate noises such as rattles, buzzes, whistles and drumming panels which can be very irritating to the crew even when they are not very loud. ARC RM 2296

PB 95551

Courtney, A. L.

Comparative effects of small changes in profile drag and weight on aircraft performance. Feb 1946. 11p tables Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.90

The relative effects of small changes in profile drag and weight on performance are considered and expressions derived which give the number of lb. change in weight which has the same effect as 1 lb. at 100 f.p.s. change in profile drag, for the more important characteristics. Rough numerical results are given in Table 2 of paragraph 5. Three classes of aircraft are considered, namely (a) those already built or of fixed design; (b) those in the early design stage when wing area can be varied to keep wing loading constant; (c) project designs for which all characteristics can be assumed continuously variable. For the latter class the effects on all-up weight to meet a given specification are considered. The note covers propeller-driven fighters and transports, including propeller-turbine transports, and jet aircraft in general. Except where otherwise stated the results obtained for propeller-driven aircraft are applicable to both piston and turbine engines. Compressibility effects are not considered. ARC RM 2260

PB 96076

Ficker, G.

Das flattern von drehflügeln. (Rotating wing flutter). Feb 1943. 24p diagrs Mi $2.00 Ph $3.75

Legends in German

Testing for safety against the occurrence of induced oscillations in wing units and control surfaces is nowadays done only on the basis of data developed by Küssner from the Prandtl-Birnbaum formulae concerning unsteady air forces, as all attempts at simplification which could be proposed led to uncertainties which made the theoretical results worthless. A simpler calculation of critical velocity than the well-known, but elaborate procedure however, is still desired. As regards the peculiar conditions pertaining to rotating wings, after treating the new magnitudes which are met with it is always argued, in opposition to more exact and simpler methods of reckoning, that a part of the elastic and inertia forces can be ignored. By retaining the exact air force formulae simpler expressions can then be arrived at which can be dealt with at a considerably reduced expenditure of time. The resulting errors will be subjected to a closer examination. Micro GDC 10/13029T, translation

PB 96713

Fischel, Jack

Wind-tunnel investigation of an NACA 65-210 semi-span wing equipped with circular plug ailerons and a full-span slotted flap. Jan 1949. 62p photos, charts, drawings, tables Mi $3.00 Ph $8.75

Contains results and discussion of lateral-control investigation of three configurations of circular plug ailerons on a thin, low-drag, semi-span wing with a 25-percent-chord, full-span, slotted flap retracted or deflected. Data obtained through a large angle-of-attack range and at Mach numbers from 0.13 to 0.61. The results indicate a satisfactory plug-aileron configuration has been developed for use with a full-span slotted flap. A comparison is included between the characteristics of the circular plug ailerons and a conventional plug and a retractable aileron previously investigated on the same wing and also between the circular plug ailerons and a sealed plain aileron investigated on the same wing. NACA TN 1802

PB 95029

Focke-Wulf Flugzeugbau, G.m.b.H.

Schlüsselliste für Flieg-Werkstoffe der Focke-Wulf-Baumester. (Code list of Focke-Wulf aircraft construction materials). May 1939. 8p tables (Text in German) Mi $1.25 Ph $1.25

1. Aircraft—Materials—Germany 2. Aircraft—Construction—Germany

PB 95503

Gdaliahu, M.

The lift increment of an aerofoil due to variation of incidence along the span, and a simple method of estimating the lift distribution. Dec 1945. 12p graphs Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.90

It is shown, on the basis of lifting line theory, that the lift increment ΔL due to a spanwise variation of geometrical incidence $\xi(y)$ (such as is associated with partial span flaps, twist, downwash produced by another aerofoil, etc.) is

$$\Delta L = \int_{-s}^{+s} \xi(y) \frac{dL_o}{dy} dy,$$

where dL_o/dy is the local lift per unit span due to a unit change of incidence, constant across the span. A general method is given for estimating the lift distribution in terms of the lift distribution at constant incidence. The method is also very suitable for the calculation of some derivatives. ARC RM 2261

PB 96073

Görtler, H.

Einfluss einer schwachen wandwelligkeit auf den verlauf der laminaren grenzschichten. (Influence of a slight wall undulation on the distribution of the laminar boundary layer). Oct 1944. 38p diagrs Mi $2.25 Ph $5.00

Legends in German

A theory of the first order dealing with the problem under the above title is developed for slight undulations, considerations being limited to short wave-lengths λ (relative to the length of wall L swept by the flow), and illustrated by numerical examples. The limiting case of very small values of λ/L is particularly tractable to mathematical treatment and simple relations are found. Micro GDC 10/5556T, translation

PB 61535t

Gothert, B.

High speed measurements on profiles of uniform thickness and different curvature in the DVL high speed wind tunnel (2.7 M, DIAM). Jun 1944. 25p charts Mi $2.00 Ph $3.75

Translation of PB 61535

Legends in German

This report may not reproduce well

Four rectangular wings of uniform thickness and different curvature were examined in the DVL high speed wind tunnel at high subsonic speeds for the purpose of obtaining data concerning the effect of the profile curvature on the properties of profiles at high speeds. ZWB FB 1910/6, translation

PB 96010

Gt. Brit. Ministry of Supply.

Aircraft material specification. Light weight finish (Cellulose base). Aug 1948. 4p drawings Available from British Information Service, 30 Rockefeller Plaza, New York 20, N. Y. $.35

1. Airplanes—Equipment—Specifications—Gt. Brit. 2. MS DTD 766

PB 96518

Gt. Brit. Ministry of Supply.

2. Teilbericht über versuchsarbeiten zur klarung von festigkeits- und herstellungs-fragen, sowie über aufgetretene schwierigkeiten. (Second interim report on experimental work to clear up strength and manufacturing problems). Feb 1943. 18p tables Mi $1.75 Ph $2.50

Legends in German

1. Focke Wulf report 2. Micro GDC 16/429(g)T, translation

PB 96097

Heller (Herr)

Hohenuntersuchungen am jumo 213 A-engine. (Altitude researches on the jumo 213 A-engine). Nov 1944. 28p diagrs Mi $2.00 Ph $3.75

Legends in German

Research into back-pressure and temperature phenomena, development of the altitude performance diagram and measurement of the performance when driven from an external source under various operational conditions. ZWB UM 1378, translation

PB 38586t

Hentschel, G.

Ermittlung der drehschwingungsbeanspruchungen an Jumo 211 A-kurbelwellen mittels einer mechanischen drehmoment messanabe der DVL. (Determination of the torsional vibration stresses of the Jumo 211 A crankshaft by means of a mechanical torque measuring hub of the DVL). Mar 1939. 18p graphs Mi $1.75 Ph $2.50

Translation of PB 38586

Legends in German

Fractures of Jumo 211 A crankshafts indicated the necessity for determining the share of torsional vibrations in fatigue fracture. Evaluation of the records obtained from the D.V.L. mechanical measuring hub indicated maximum stresses of the order of $\tau = +3.86\ Kg/mm^2$, which would not suffice by themselves to produce break-down of the crankshaft. Analytical conversion of the torsional stresses to the standard conditions in flight, without measuring hub, still produce reasonable alternating stresses. One possible explanation for the crankshaft fractures may be that these torsional vibration stresses are super-imposed by longitudinal vibrational stresses in a restricted speed range about 2,100 r.p.m., such as have already been determined, causing the combined stress, including the static component, to transgress the limit of fatigue endurance. ZWB UM 567, translation

PB 96710

Hess, Robert V. and Gardner, Clifford S.

Study by the Prandtl-Glauert method of compressibility effects and critical Mach Number for ellipsoids of various aspect ratios and thickness ratios. Jan 1949. 26p charts Mi $2.00 Ph $3.75

By the use of a form of the Prandtl-Glauert method that is valid for three-dimensional flow problems, the value of the maximum incremental velocity for compressible flow about thin ellipsoids at zero angle of attack is calculated as a function of the Mach number for various aspect ratios and thickness ratios. The critical Mach numbers (within the accuracy of the Prandtl-Glauert method) of the various ellipsoids are also determined. The results indicate an increase in critical Mach number with decrease in aspect ratio which is large enough to explain experimental results on low-aspect-ratio wings at zero lift. NACA TN 1792

PB 95830

Hill, Thomas C. and Savely, Harvey E.

Tests of T-8 indoctrination catapult. Nov 1948. 5p chart Mi $1.25 Ph $1.25

1. Aircraft catapults 2. AAF TSEAA MR 695-66K

PB 37253t

Jacobs, W.

Calculation of the induced cross-wing of aircraft. Feb 1943. 67p diagrs, tables Mi $3.00 Ph $8.75

Translation of PB 37253

Legends in German

When an aircraft is in a side-slip a cross-wind is induced, which is proportional to the angle of side-slip and depends in a large measure on the height at which the wing is mounted on the fuselage. Like the down-wash, this induced cross-wind gives rise to an increase or a decrease in the contribution made by the rudder unit to the directional stability. Adopting certain simplifying assumptions, the whole induced field of flow is calculated for one or two wing and fuselage arrangements. Normally, in the case of the low-wing aircraft, the induced cross-wind produces an increase and of the high-wing aircraft a decrease in the directional stability. The calculated results are compared with six-component measurements with and without tail unit and with directional measurements. ZWB FB 1745, translation

PB 96123

Koch, G.

Kraftmessungen an Körpern mit gepfeilten und ungepfeilten Flügeln. (Force measurements on bodies with swept-back and straight wings). Apr 1947. 25p illus, diagrs (Text in German) Mi $2.00 Ph $3.75

This report gives the results of 3-component measurements on half-models with swept-back and straight wings with small aspect ratio. The tests were carried out in the 25 x 25 cm high speed tunnel A 7 of the LFA at Mach numbers of 0,4 to 0,9.

—62288

PB 60825t

Kuhle, E.

The tail unit with leading edge flap as an elevator balancer. Jan 1942. 39p charts Mi $2.25 Ph $5.00

Translation of PB 60825

Legends in German

This report may not reproduce well

An account is given of theoretical investigations on a horizontal fin with flap fitted with a leading edge flap coupled with and balancing the elevator. The chord of the fixed central portion and the position of the latter in the chord direction and the extent of the coupling factor are varied systematically. The tail unit with the chord of the central portion equal to zero (i.e. the simple horizontal fin flap with coupled air foil deflection) is included as a special case. For calculation purposes, the tail unit is regarded as a doubly hinged slotless plate with a thickness equal to zero. Prominence is given to investigations on the hinge moments with particular regard to conditions with control surfaces released. With the aid of examples, the author discusses the results obtainable with an a/c using a tail unit with a coupled leading edge flap. ZWB FB 1507/1, translation

PB 96136

Lange (Herr) and Fink (Herr)

The magnetic state of vehicles. Jul 1943. 11p illus Mi $1.75 Ph $2.50

An investigation is to be made in this report of the conclusions which can be drawn from variations in the magnetization, with respect to the magnetic state of vehicles; which magnetic material constants are decisive for assessing the magnetic behavior of the materials in the terrestrial field; and what protective measures can be applied against undesirable variations in the magnetization of vehicles. ZWB RR 1810, translation

PB 96140

Lehmann, R.

Light metal resistance welding in aircraft construction. Jan 1944. 14p illus, diagrs Mi $1.75 Ph $2.50

Legends in German and English

1. Gt. Brit. Ministry of Supply 2. Welding, Resistance—Light metals—Germany 3. Alloys, Light metal-Welding—Germany 4. RTP/TIBT, translation 5. Micro GDC 3E/65T, translation

PB 37720t

Liebe, W.

Messverfahren für instationare flugbewegungen. (A test method for accelerated flight conditions). May 1938. 33p photo, diagrs Mi $2.25 Ph $5.00

Translation of PB 37720

Legends in German

In the present report a method is described of recording in detail any accelerated motion of an aeroplane in flight. The instruments used are described and their reliability is discussed, so that it is possible to make an estimate of the accuracy involved. The procedure is described as far as the evaluation of the results. Comparative tests, as well as the results already obtained from the method, confirm its practicability. ZWB FB 929, translation

PB 96709

Luoma, Arvo A.

An investigation of the section characteristics of plain unsealed ailerons on an NACA 66, I-115 airfoil section in the Langley 8-foot high-speed tunnel. Jan 1949. 65p photos, charts, tables Mi $3.00 Ph $8.75

Contains section characteristics, including airfoil normal-force, airfoil pitching-moment, aileron normal-force, and aileron hinge-moment coefficients, for an NACA 66, I-115 airfoil section equipped with unsealed 20-percent-chord plain ailerons of true-airfoil-contour profile and 30° beveled-trailing-edge profile, for Mach numbers up to 0.75. NACA TN 1596

PB 96730

McCormack, Gerald M. and Cook, Woodrow L.

A study of stall phenomena on a 45° swept-forward wing. Jan 1949. 29p photos, diagrs, drawings, table Mi $2.00 Ph $3.75

Three-component force data and pressure-distribution data obtained on a large-scale 45° swept-forward wing in the Ames 40- by 80-foot wind tunnel are presented. The occurrence of separation and the effects of separation on the longitudinal characteristics of the swept-forward wing are considered. NACA TN 1797

PB 95507

Morris, J. and Morrison, D.

The rolling vibration of an aircraft. Aug 1945. 12p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.90

This report deals with the rolling vibration of an aircraft in which the flexibility of the fuselage and wings are taken into account. To render the analysis tractable each wing was divided chordwise into three portions, the mass of each being assumed concentrated at its centre of gravity. The fuselage likewise was divided into four portions. The treatment adopted was that based on the deflection coefficient method and the escalator process, which enables the solution for the whole system to be built up from solutions for the constituent parts of the system. In particular the effect of variation in the engine mounting stiffness on the natural frequencies of the system is investigated. A fully worked example is given relating to an

actual aircraft for which a few experimental results were available. The agreement between the calculated and experimental results appears to be fairly satisfactory. ARC RM 2290

PB 96148

Muller, K. J.

The cooling of bodies exposed to a flow of gas by blowing cold air into the boundary layer. Sep 1944. 13p illus, diagrs Mi $1.75 Ph $2.50

Legends in German

The temperature distribution in the boundary layer and hence the transmission of heat is calculated as a corollary to the method for determining the speed distribution indicated by H. Schlichting. In the case of turbulent boundary layers the difficulty of calculation is greatly increased. A law of similarity is given for this which is characteristic of the method. The correctness of the views advanced is shown on the basis of experimental results available for a symmetrical profile body cooled by a blast of air. Micro GDC 10/980T, translation

PB 96144

Multhopp, H.

The problem of the shortest take-off run. Jan 1943. 9p diagrs Mi $1.25 Ph $1.25

A new formula is found, the validity of which can easily be shown graphically, for the take-off path; the novelty of this formula lies in the fact of the insertion of the most favorable value for c_a at the moment of unsticking. By its use, the effect of the different quantities which influence the take-off path can be observed with greater facility, in particular that of the wing flaps. Micro GDC 16/57T, translation

PB 96878

Nitzberg, Gerald E. and Crandall, Stewart.

A study of flow changes associated with airfoil section drag rise at supercritical speeds. Feb 1949. 31p photos, diagrs Mi $2.25 Ph $5.00

A method is developed for estimating, for an airfoil section at an arbitrary angle of attack, the drag-divergence Mach number, the free-stream Mach number at which the abrupt supercritical drag rise starts. This method is used to predict with satisfactory accuracy the drag-divergence Mach number for a variety of airfoil sections. Some of the flow characteristics for moderately thick airfoil sections at supercritical Mach numbers are discussed. NACA TN 1813

PB 95549

Nivision, J.

Flight tests on the longitudinal behaviour of the vengeance IV with special reference to the characteristics of the spring tab elevator. Apr 1946. 24p illus, drawings, graphs Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.45

This work is part of a general flight programme of research designed to fill the gaps in our practical knowledge of spring tab controls. The results show that the form of spring tab balance employed on the Vengeance IV elevator has enabled reasonably light stick forces to be achieved without introducing any penalizing adverse flying characteristics. The most interesting feature of the spring tab layout is the use of a subsidiary spring in conjunction with an aerodynamically unbalanced tab. By this means a stick force per "g" has been obtained which is virtually independent of speed. ARC RM 2268

PB 96154

Pfau, H.

The charging and air conditioning of pressure cabins by means of a waste air turbine. Jun 1947. 13p illus, diagrs Mi $1.75 Ph $2.50

Legends in German

A new method of charging pressure cabins is worked out and described. The operational requirements and working conditions are mathematically analyzed. The influence of the degree of humidity of the air when operating as a cooling apparatus is demonstrated. The researches made by the author at the D. V. L. Berlin Adlershof are described. Micro GDC/250IT, translation

PB 96727

Phillips, William H.

Theoretical analysis of oscillations of a towed cable. Jan 1949. 19p diagrs Mi $1.75 Ph $2.50

From a theoretical study of the transverse oscillations of a towed cable, it has been found that oscillations traveling downwind along the cable are amplified by aerodynamic forces when the airspeed is greater than the speed of wave propagation. Applications of the results to towed airspeed heads are discussed. NACA TN 1796

PB 36430t

Regenscheit, B.

Suction flap wing No. 23012 interim report on a systematic thickness series. Jan 1942. 12p drawings, diagrs Mi $1.75 Ph $2.50

Translation of PB 36430

Legends in German

In this report the values of C_a, C_p and C_q measured on suction flap wing 23012 at different geometrical angles of incidence α_g and flap angles η_{K1} are given. The form of transition from wing to flap was also modified. In addition, the results obtained by measuring the effect of an auxiliary split flap on the aileron flap are included in the report. The measurements showed that the form of transition from wing to flap materially influence the measured values, particularly Ca and Cq. The auxiliary split flap, if the flap angle was not too great, gave at certain angles of incidence a

notable gain in lift as well as a reduction of the minimum suction volume. ZWB FB 1543, translation

PB 96726

Reisert, Thomas D.

Gust-Tunnel investigation of a wing model with semichord line swept back 30°. Jan 1949. 12p photos, diagrs, drawing, table Mi $1.75 Ph $2.50

The results of tests made in the Langley gust tunnel on a 30° sweptback-wing model indicate that within the scope of the data and the values of gradient distance investigated, the maximum acceleration increment depends on the slope of the lift curve of the equivalent straight wing multiplied by the cosine of the angle of sweep and on the effect of gradual penetration of the sweptback wing into a gust. NACA TN 1794

PB 39004t

Ribnitz, W.

The air drag of seaplane floats and flying-boat hulls in free flight. Jun 1938. 18p drawings Mi $1.75 Ph $2.50

Translation of PB 39004

Legends in German

The available experimental data on the air drag of seaplane floats and flying boat hulls are examined and classified. From the material thus collected, the general laws governing the relationship between float drag and form, are determined. The measure of the aerodynamic quality of the float gear is defined as the ratio of the drag of a smooth, stream-lined body, to the actual drag of the float gear, and a comparison made, on this basis, with the aerodynamic quality of landplane fuselages. ZWB UM 536, translation

PB 96206

Rossmann, F.

The measurement of polarized electrical conductivities in the free atmosphere. Oct 1944. 35p illus, drawings, graphs Mi $2.25 Ph $5.00

Legends in German

A method and apparatus for measuring polarized electrical conductivities was developed to be carried on glider DFS 230. By the use of an ion condenser with a large plate surface and a single filament electrometer of high sensitivity, it was found possible to reduce the time required to make the measurements to a few seconds, so that continuous measurements are possible. The results of 15 flights are reproduced as graphs and discussed. Micro GDC 10/5518T, translation

PB 96124

Sagrauske, Koche'

Bericht über betriebserfahrungen mit BV 222 VI. (Report on service experience with the BV 222 VI flying boat). Jan 1942. 33p drawings, tables Mi $2.25 Ph $5.00

Legends in German

The present report contains—arranged according to structural groups—all the important operational tests and modifications which were made during the whole test period, up to and including November 1941. The summary of the available material was made in closest collaboration with the inspection directorate. For the sake of completeness the results of static tests are also given. The results of measurements made during flight, as regards flight performances, cooling efficiencies, stability, etc., have already been given and discussed in Report FE 51, Parts 1 and 2. Micro GDC 23/62T, translation

PB 39095t

Scherer, A.

Naseneinlauf-untersuchungen am pfeilflugel. (Researches on air intakes in the leading edge of a swept back wing). Nov 1944. 47p illus, graphs Mi $2.50 Ph $6.25

Translation of PB 39095

Legends in German

The present report contains the results of tests on the shaping of an opening in the leading edge (sweep of the leading edge line 40°) for the air intake of a turbo-jet power plant. Measurements were made of the flow energy in the intake and the wall pressure distribution in the mean section of the intake profile for three arrangements and several coefficients for the quantity of air passing through. The report is the first part of Test II of the 12.10.43. Göttingen programme for the installation of turbo-jet power plants. Micro GDC 10/5474T, translation

PB 96500

Schiemann, H.

Verfahren zum entwurf von starttuchtigen seeflugzeugen an hand von modellversuchen. (A method for the design of seaplanes for easy take-off by model tests). Aug 1946. 51p photos, drawings, diagrs Mi $2.75 Ph $7.50

Legends in German

After a survey of the total hydrodynamic requirements of a seaplane flotation gear, the development of design technique up to the present day is surveyed. In Germany, this development has led to the design of the familiar DVL Standard Float, in using which, only overall length, breadth, and rise of floor are open to selection, all other form parameters being already fixed. Detailed analysis of some curves of excess thrust, resulting from the association of different DVL Standard floats with a specific design, shows that the DVL Standard form will furnish the optimum "take-off efficiency," i.e. the most favorable relationship between short take-off run and take-off time, essentially and only with specific design conditions, which do not necessarily conform to the requirements of the general design. It is now suggested, following the trend of practical experience, to develop the design of float arrangements by the analysis of a

number of combinations of DVL-A floats, for the resulting excess thrust curves, after which, the attainable optimum form for the particular case can be arrived at by approximately estimating the most favorable variations from the standard form. In view of the existing state of seaplane research, this will inevitably call for a certain number of towing tests for verification. Micro GDC 172T, translation

PB 96221

Schmitz, G.

Measurement of vertical landing velocity of the Ar.232 aircraft with tricycle undercarriage. Mar 1944. 37p drawings, graphs Mi $2.25 Ph $5.00

Legends in German

This report may not reproduce well

The DVL carried out measurements of vertical landing velocities of the Tricycle type aeroplane Ar.232. The tests covered landings on concrete runways and grass surfaces at all up weights ranging from 14.6 to 18.6 tons (overload). Altogether 29 landings were observed, 17 on concrete and 12 on grass. In addition, the vertical component of the deceleration at the center of gravity was measured during the landing shock. Micro GDC 10/5200T, translation

PB 36619t

Schuh (Herr)

Abschatzung des turbulenten reibungswiderstandes hochbeheizter ebener platten. (An estimate of the turbulent friction drag of a two-dimensional plate heated to a high temperature). Feb 1944. 11p graphs Mi $1.75 Ph $2.50

Translation of PB 36619

Assuming that in the boundary layer along the entire plate there occurs a turbulent flow, calculations were made using the mixture length theorem, of the deviations of the velocity profile, which appear at high temperatures (up to 600° C and above) due to temperature variability of the material values; it was found that the drag, as compared with that of the non-heated plate is practically unaltered until the temperature reaches 900° C. ZWB FB 1889, translation

PB 36474t

Schuh, H.

The solution of the laminar boundary layer equation for a two-dimensional plate for a given velocity and temperature field having varying material values, and for a diffusion field at high temperatures. Aug 1944. 18p diagrs Mi $1.75 Ph $2.50

Translation of PB 36474

Legends in German

The following report is intended to show that the boundary layer equations obtained for a flow along a two-dimensional plate can be calculated over a velocity and temperature field for varying material values by relatively simple methods, if the methods of solution given by Piercy and Preston are employed. Further, the diffusion field can be calculated if the final lateral velocities at the wall occurring in higher concentrations are taken into account. ZWB FB 1980, translation

PB 36606t

Sotterf, W.

Der landevergang im modellversuch wasserlandung Bf 109. (Landing phenomena in model experiments ditching on water of the Bf 109). Jul 1938. 26p illus, diagrs Mi $2.00 Ph $3.75

Translation of PB 36606

Legends in German

The model test should elucidate motion phenomena of a land plane when ditching on water. After explaining the laws governing models we shall describe test procedure and arrangements. By means of retardation time-diagrams illustrating the landing of a Bf 109 model we arrive at a retardation peak of >20 g, which by radiator streamlining and brake skid can be reduced to 4 or 6 g. ZWB FB 951, translation

PB 96734

Stevens, Victor I. and others.

Wind-tunnel investigation of a 1/20-scale powered model of a four-engine transport airplane. Jul 1944. 172p photos, drawings, diagrs, (3 fold diagrs) Mi $6.50 Ph $22.50

Tests have been made on a 1/20-scale model of a four-engine transport airplane to determine the stability characteristics, empennage control-surface effectiveness, the effect of propeller rotation on longitudinal stability, and a method for carrying spare wing panels under the fuselage. The effect of two modes of model power operation on the characteristics of the model was studied. The effect of landing gear, open cowl flaps, and center-section split flaps was also investigated. The results indicate that the model possesses satisfactory stick-fixed longitudinal stability for all normal flight conditions except for high power with flaps extended. The stick-free longitudinal stability is unsatisfactory in a rated-power climb, although it may be remedied through the use of a spring in the elevator system counteracted by nose-up tab. Stick-free stability is also lacking for any power condition with flaps fully extended, owing to under-surface tail stall. The elevator power in landing is marginal. Control forces are high for landing and accelerated flight for the design control linkage; however, a change in the control linkage should bring the forces within the desired limits. A change in direction of propeller rotation produces little change in longitudinal stability of this model, primarily because the horizontal tail completely spans the slip-streams of the inboard propellers. Directional characteristics of the model are satisfactory. The rudder power is sufficient to maintain zero side slip upon failure of any one engine, and the control forces required

are satisfactorily low. Application of take-off power in the landing configuration completely neutralizes the normal dihedral effect, requiring use of the ailerons rather than the rudder to keep the wings level. From an aerodynamic viewpoint, wing panels carried under the fuselage should be placed lengthwise of the fuselage with the inboard ends butted together. Practically no difference is indicated between the results for the two modes of model power operation, provided the horizontal tail is not stalled. In general, the landing gear increases the static longitudinal stability, power off. However, with power at a flap deflection of 25°, stability is decreased. The effect at a flap deflection of 50° is obscured by the stalling of the tail. NACA A-94

PB 96523

Valiton, Arthur P.

Multiplace life raft carrying case. Dec 1948. 13p photos Mi $1.75 Ph $2.50

1. Rafts, Life—Cases 2. AAF TSEAA MR 670-1J

Instruments

PB 96805

Abel, D.

Operational suitability test of the T-1 aeronautical computer. Dec 1948. 15p photo Mi $1.75 Ph $2.50

1. T-1 (Astronomical computer) 2. Computers, Astronomical 3. Astrophysics 4. APGC Proj 4489-5

PB 95568

Astholz, Paul T.

Alarm indication in aircraft localizer and glide path systems using a cross-pointer meter. n.d. 8p drawings Mi $1.25 Ph $1.25

1. Airplanes—Alarms—Inventions

PB 95323

Christensen, Julien M.

Effect of the staircase scale on dial reading accuracy. Oct 1948. 17p diagr, graphs, tables Mi $1.75 Ph $2.50

1. Navigation, Aerial—Dials 2. Instruments, Aeronautical—Dials 3. AAF TSEAA MR 694-1-P

PB 96164

Gt. Brit. Ministry of Supply.

The Siemens—LGW. Course controller K, 12. Sep 1940. 21p drawings, fold diagrs Mi $2.00 Ph $3.75

Legends in German and English

1. Controllers, Course (Siemens K 12)—Germany 2. Micro GDC 3A/8T, translation

—82288

PB 96139

Lauer, H.

Description of an objective phonometer for the measurement of aircraft noises. n.d. 8p illus, diagrs Mi $1.25 Ph $1.25

Legends in German and English

1. Gt. Brit. Ministry of Supply 2. Hertz Institute for Oscillation Research—Germany 3. Phonometers—Aircraft—Germany 4. Airplanes—Sound level—Measurements—Germany 5. ZWB RR FB 464, translation 6. RTP/TIBT, translation 7. Micro GDC 10/786T, translation

PB 95553

McCaffrey, B. I.

A pressure-height corrector for radar altimetry. Sep 1948. 10p illus, drawings, graphs Mi $1.25 Ph $1.25

This report describes an auxiliary device to be attached to the narrow beam recording radar altimeter (developed at the National Research Council of Canada) in order to correct the radar profile graph automatically for deviations from level flight. Owing to the difficulty of maintaining level flight within the required limits of accuracy, correction must be made for these deviations. Previously, this was done by photographing the pressure altimeter at intervals. The radar graph was then laboriously adjusted to level flight from this information. The pressure-height corrector applies the deviation correction to the radar graph instantaneously and continuously. The device consists of an aneroid capsule operating a small capacity in an oscillator-discriminator circuit which feeds out a d-c correction voltage. The observed accuracy of the corrector is ±10 feet. NRCC ERA 160

PB 96137

Meise (Herr)

Me.110—Automatic control device for use in combat. Jul 1941. 3p diagrs Mi $1.25 Ph $1.25

Legends in German and English

1. Gt. Brit. Ministry of Supply 2. Controls, Automatic—Germany 3. Airplanes—Equipment—Germany 4. RTP/TIBT, translation 5. Micro GDC 15/154T, translation

PB 96151

Patin Albert Werk-Stätten für Fernsteuerungsteknik, Berlin.

Provisional description of the Patin course control PKZ 14. Jun 1944. 40p illus, diagrs, drawings Mi $2.25 Ph $5.00

Legends in German

1. Gt. Brit. Ministry of Supply 2. Airplanes—Course control—Germany 3. Micro GDC 3A/3T, translation

PB 96153

Plesse, H.

Das warmepeilgerat der Firma Carl Zeiss. (The Zeiss heat D/F set). Sep 1944. 30p illus, diagrs Mi $2.00 Ph $3.75

Legends in German

1. Gt. Brit. Ministry of Supply 2. Bolometers—Germany 3. W device—Germany 4. Micro GDC 3A/5t, translation

PB 96236

Spragg, S. D. S. and Rock, Milton L.

Dial reading performance as related to illumination variables: II. Spectral distribution. Dec 1948. 26p graphs, tables Mi $2.00 Ph $3.75

1. Instruments, Aeronautical—Lighting 2. Instruments, Aeronautical—Dials 3. Spectral distribution 4. AAF TSEAA MR

PB 42617r2

U. S. Air Force and U. S. Bureau of Aeronautics.

Handbook: Overhaul instructions, electric tachometers. (General Electric). Dec 1947. 13p photos, drawings, tables Mi $1.75 Ph $2.50

Revision 2 of PB 42617

1. AAF TO 05-5-5-2

PB 42603r2

U. S. Air Force and U. S. Bureau of Aeronautics.

Handbook, operation, service, and overhaul instructions with parts catalog: Aircraft sextant type A-10A. (Fairchild). Jan 1948. 4p photos, drawing Mi $1.25 Ph $1.25

Revision 2 of PB 42603

1. AAF TO 05-35-33-2

PB 42592r

U. S. Air Force and U. S. Bureau of Aeronautics.

Handbook, operation, service, and overhaul instructions with parts catalog: Type A-10 aircraft sextant. (Fairchild). Jan 1948. 3p photo Mi $1.25 Ph $1.25

Revision 1 of PB 42592

1. AAF TO 05-35-12-1

PB 95480

U. S. Air Force and U. S. Navy Dept.

Regulators: Hydraulic pressure. Air Force-Navy aeronautical bulletin. Oct 1948. 1p tables Mi $1.25 Ph $1.25

1. Pressure regulators—Hydraulic 2. AN AB 115C

—62288

PB 44363r2

U. S. Army Air Forces and U. S. Bureau of Aeronautics.

Parts catalog for fuel gage systems (Liquidometer). Aug 1947. 37p drawings, tables Mi $2.25 Ph $5.00

Revision 2 of PB 44363

1. AAF TO 05-65A-7-2

Engines and Propellers

PB 96064

Bader (Herr) and others.

100 Std.-dauerlauf des motors DB 610/120005 mit dreirad-Ge-triebe bestehend aus den motoren DB 605/100009 x und DB 605/90013W. (100 hours continuous run of DB 610'120005 power plant with 3-wheel transmission (consisting of DB 605'100009 x and DB 605'90013W). Aug 1942. 5p illus, diagrs Mi $1.25 Ph $1.25

Legends in German

Diagrams may not reproduce well

1. Gt. Brit. Ministry of Supply 2. Engines—Performance—Germany 3. Micro GDC 11/261T, translation

PB 36469t

Boettcher (Herr) and Hass (Herr)

The electrical conductivity and oxidation of sublimated aluminum films. n.d. 10p illus, diagrs Mi $1.25 Ph $1.25

Translation of PB 36469

Legends in German

The dependence of the resistivity of aluminum film deposited by high vacuum sublimation on the thickness and temperature of the condensing surface was determined. The results obtained for film thicknesses of over 300 AE correspond to those obtained with the solid material; below this thickness the values obtained increase, attaining a 10-fold value with a thickness of 62 AE. ZWB FB 1998, translation

PB 96059

Bollenrath (Herr) and others.

Einfluss der warmbehandlung auf die festigkeit von luftschrauben aus Al-Zn-Mg-legierungen. (Effect of heat-treatment on the strength of propellers made from aluminium-zinc-magnesium alloys). Jul 1943. 19p illus, diagrs, tables Mi $1.75 Ph $2.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Propeller blades—Compressibility tests—Germany 3. Aluminium-zinc-magnesium alloys—Heat treatment,

Effects of—Germany 4. Micro GDC 10/5682T, translation

PB 96063

Bruckner (Herr)

Festigkeits und schwingungsuntersuchung für das stahllaufrad. (Strength and vibration analysis for steel rotor of DB603U engine blower). Apr 1944. 6p diagrs Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Vibration, Torsional—Germany 3. Rotors—Tests—Germany 4. Micro GDC 11/105T, translation

PB 96506

Cordes, C.

Berechnung von axialluftern für flugzeugtriebwerke. (The calculation of axial fans for aircraft power units). n.d. 18p diagrs, tables Mi $1.75 Ph $2.50

Legends in Germany

In working out projects for power units which provide a fan for the purpose of cooling, it is important for the design of the fan, to consider its behavior in the varying operating conditions due to the different flying circumstances which occur. The question of greatest interest is the quantity of air flow which is to be expected. Consequently, whilst the design problems which have already been copiously discussed will merely be briefly mentioned in the present article, the calculation will be dealt with in detail. For this reason, special importance will be attached to the relationship between the work done by the fan and ratio of the drag of the total cooling air duct to the external flow conditions. The method of investigation obtained will be applied to a blower which has already been tested experimentally and a power unit project. Micro GDC 10/13040T, translation

PB 96045

Daimler-Benz A. G., Mannheim, Ger.

Bearing loads in the jumo 211 aero-engine at n=2600 and 32 r.p.m. Dec 1942. 9p graphs, tables Mi $1.25 Ph $1.25

1. Jumo 211 (Airplane engine) 2. Bearings—Load—Germany 3. Gt. Brit. Ministry of Supply 4. RTP/TIBT, translation 5. Micro GDC 11/86T, translation

PB 96081

Davies, C. M., tr.

GM 1 power-boost devices mark G5 and G6 for aircraft Me 109 F, description and operating instructions. (German handbook, Ed. A). Sep 1941. 12p Mi $1.75 Ph $2.50

1. Gt. Brit. Ministry of Supply 2. Power control units—Germany 3. Airplanes—Equipment—Germany 4. Airplanes—Acceleration—Germany 5. RTP/TIBT 6. Micro GDC 15/138T, translation

—62288

PB 96082

Eckert, E.

Stromungsuntersuchungen an gasturbinen. (Flow research on gas turbines). May 1943. 16p illus, diagrs Mi $1.75 Ph $2.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Luftfahrtforschungsanstalt Hermann Göring, E.V., Braunschweig, Ger. 3. Turbines, Gas—Research—Germany 4. Micro GDC 10/10068T, translation

PB 96069

Enders (Mr.) and Garinei (Mr.)

Investigation of rotary oscillation in the DB609 engine with disc shaft and counter-rotating propellers. May 1943. 23p charts, fold table Mi $2.00 Ph $3.75

Legends in German

1. Gt. Brit. Ministry of Supply 2. Engines, Aircraft—Performance—Germany 3. Propellers—Rotation—Germany 4. RTP/TIBT 5. Micro GDC 11/96T, translation

PB 96067

Garinei (Mr.)

Analysis of torsional vibration of the high-altitude engine test bench with DB605 engine and two high-altitude blowers as exhausters. Mar 1943. 11p charts, table Mi $1.75 Ph $2.50

Translation from the German

Legends in German

1. Gt. Brit. Ministry of Supply 2. Torsion bars—Germany 3. Engines, Aircraft—Altitude effects—Germany 4. Exhausters—Electric drive 5. RTP/TIB T 6. Micro GDC 11/92T, translation

PB 96072

Gehlke, Werner

Pressure measurements of a knocking engine. n.d. 57p drawings, graphs Mi $2.75 Ph $7.50

Legends in German

Parts of this report may not reproduce well

1. Engines—Knocking—Germany 2. Title: Pressure measurements of a knocking engine 3. Gt. Brit. Ministry of Supply 4. Micro GDC 10/436T, translation

PB 96201

Geiger (Herr)

Tests of the DB605 as engine in Me.109 G-5 airframe. Jun 1944. 18p photos, charts Mi $1.75 Ph $2.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Engines, Aircraft—Tests 3. RTP/TIBT 4. Micro GDC 15/68T, translation

PB 95173

Germany. Reichsluftfahrtministerium.

Principles of the design and operation of injection pumps and nozzles for Diesel and Otto

aircraft engines. 1940. 13f (Text in German) Mi $1.75 Enl Pr $3.75

See PB 95173 for abstracts. 1p. Mi $1.25 Ph $1.25

1. Engines, Diesel—Germany 2. Engines, Otto—Germany 3. Nozzles, Fuel—Germany 4. Pumps, Fuel—Germany 5. Micro BIOS FD 2871/46, Item 31, Frames 1-12

PB 95861

Grave, Caswell, 11.

Operational suitability test of all-metal main rotor blades for the H-5 series helicopter. Nov 1948. 29p tables, illus Mi $2.00 Ph $3.75

1. Helicopters—Flight tests 2. Rotor blades

PB 96159

Gt. Brit. Ministry of Supply.

Engine components—control of fracture risks by stress-optics. 1942. 10p photos, diagrs Mi $1.25 Ph $1.25

Legends in German

1. Engines—Stresses—Germany 2. Stress—Optics—Germany 3. Micro GDC 3E/16T, translation

PB 96101

Gt. Brit. Ministry of Supply.

Vibration investigation of the DVL hollow blade and the ceramic blade for the 9-2279. n.d. 6p graphs, tables Mi $1.25 Ph $1.25

1. Propeller blades—Vibration—Germany 2. Blades, Ceramic—Germany 3. Hirth Motorenwerke G.m.b.H., Stuttgart, Ger.

PB 96158

Gt. Brit. Ministry of Supply.

Wind-tunnel tests on Argus power units for the Me 328. n.d. 15p drawings, (fold drawing) charts Mi $1.75 Ph $2.50

Legends in German

Parts of this report may not reproduce well

Measurements were made on a new Me. 328 power unit (Argus unit) in the cold state, in the 3 x 4m. wild-tunnel of the Messerschmitt AG., to determine lift, drag, and longitudinal moment. Tests were carried out with and without intake cowls, and also with a front and rear outlet attachment. With each of the five experimental units measurements were made over a range of speeds with a constant angle of incidence of 0°, and over a range of angles of incidence with a constant speed of $v = 50$ m/sec. Micro GDC 15/59T, translation

PB 96070

Grunagel (Dr.)

Anlassleistungen und freilaufdrehzahl des PTL 021 gerats. (Starting power and idling speed of PTL 021 units). Mar 1944. 9p diagrs Mi $1.25 Ph $1.25

Legends in German

—82288

Gt. Brit. Ministry of Supply 2. Power units—Germany 3. RTP/TIBT, translation 4. Micro GDC 11/75T, translation

PB 96100

Heinkel, E.

Technische unterlagen zum abgasturbolader 9-2279. (Exhaust turbo-blower 9-2279 technical data). Oct 1944. 34p illus, drawings (8 fold drawings) Mi $2.25 Ph $5.00

Legends in German

1. Turbo blowers—Germany 2. Title: Exhaust turbo blower 9-2279, technical data 3. Gt. Brit. Ministry of Supply 4. RTP/TIBT, translation 5. Micro GDC 3E/2T, translation

PB 96099

Helmbold, H. B.

Der aerodynamische entwurf von luftschrauben. (The aerodynamic design of propellers). n.d. 43p diagrs (fold diagr) Mi $2.50 Ph $6.25

Legends in German

Parts of this report may not reproduce well

1. Propeller blades—Aerodynamics—Germany 2. Gt. Brit. Ministry of Supply 3. RTP/TIBT, translation 4. Micro GDC 3E/7T, translation

PB 96502

Hoffmann, H.

Schubmessung beim starr befestigten Argus—Schmidtrohr. Verlauf des zeitmittelwertes des statischen druckes über der geratelange. Bildung eines dimensionslosen schubbeiwertes. (Measurement of the thrust of a rigidly-fixed argus-schmidt tube. Development of the mean periodic value of the static pressure along the length of the tube. The formation of a non-dimensional thrust coefficient). Mar 1945. 31p photos, diagrs, graphs, table Mi $2.25 Ph $5.00

Legends in German

A method of measurement is described, enabling the determination of the thrust of a rigidly—fixed tube; a static tube placed in the issuing jet being used to obtain a linear thrust calibration curve. Systematic experiments on the determination of the time-mean of the static pressure, led to the development of a gauge instrument using water as the pressure—transmitting medium, and enabling perfect transmission of the time mean value. The development of the time-mean value of the static pressure with reference to the length of the tube, has been plotted for different rubbing conditions of the tube. Following a suggestion by Lutz, a non-dimensional thrust coefficient has been developed, which for the actual tube used in these tests has a value of 0.88, enabling the thrust value to be determined in a simple manner from the combustion chamber pressure. ZWB UM 2552, translation

PB 96126

Kimmel, A.

Fundamental analysis of the excitation forces in torsional and bending vibration of aero-engines. Jan 1939. 35p diagrs, graphs, tables Mi $2.25 Ph $5.00

Legends in German

A sample method of calculation enabling the determination of the exciting torsional and bending forces (gas and inertia forces) for the case of central linkage of the connecting rod, making extensive use of tabular coefficients and saving a great deal of time and labor. A curve of the harmonics of the gas bending forces is appended, capable of general application to standard spark-ignition engines. ZWB FB 1017, translation

PB 96122

Koyemann, A.

Optimum plan form and pitch distribution for propellers. May 1942. 57p diagrs, tables Mi $2.75 Ph $7.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Propellers—Pitch distribution—Ger. 3. Micro GDC 3E/23T, translation

PB 96125

Kress, H.

DVL internally-cooled turbine blades. Oct 1943. 10p illus, drawings, graph Mi $1.25 Ph $1.25

Legends in German

It has been proved by lengthy experiments that at a higher number of revolutions per minute and with exhaust gas temperatures in the region of 1080°C., all the usual output requirements and standards of an Otto (Four-stroke) Aero Engine can be achieved with a generous margin of safety, by use of the internally-cooled rotors designed and developed by D.V.L., despite the fact that its construction is extremely simple and that it requires a minimum weight of material. The time required to make such a rotor, including blading thereof, is less than 9 working hours, and this figure could still be further reduced by mass production methods. ZWB UM 739, translation

PB 96127

Kühl, H.

Principles of governing P.T.L. power units. Jun 1944. 31p diagrs, fold diagr Mi $2.25 Ph $5.00

Legends in German

The most important aspects of the problem of governing P.T.L. power units, which have been brought to light in the course of experimental work already completed on the behavior of these power units under different operating conditions and which took into account the enormous importance of the influence of the air screw characteristic, are here discussed. A simple method of achieving the desired end which would appear to be also applicable to T.L. power units, is diagramically illustrated. A governor of this type is, at the present moment, in the course of development. ZWB UM 1272, translation

PB 36539t

Lambrich, R.

Die arbeit der erregenden krafte in reinmotoren. (The work of the exciting forces in in-line engines). Sep 1941. 45p diagrs Mi $2.50 Ph $6.25

Translation of PB 36539

Legends in German

In the vibrational analysis of propelling plant a considerable proportion of the work involved is concerned with the determination of the relative harmfulness of the individual critical engine speeds. The requisite calculation data for this purpose, have accordingly been collated in the present report, in the form of curve charts and tables, in such manner as by their use, to enable a considerable saving in the labor of calculation involved. ZWB FB 1473, translation

PB 96132

Lehmann (Herr)

Range and endurance of TL, PTL, ZTL and spark ignition power units. Jul 1943. 9p diagrs Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Ignition, Spark—Power—Germany 3. RTP/TIBT, translation 4. Micro GDC 14/210T, translation

PB 96141

Lehmann, R.

Engine test data BMW 801 D,MG series 2 and BMW 803. Aug 1943. 38p drawings, diagrs, tables Mi $2.25 Ph $5.00

1. Gt. Brit. Ministry of Supply 2. Engines—Tests—Data—Germany 3. Micro GDC 7/30T, translation

PB 37315t

Linke, W.

Development and comparison of new radiator elements Part II. The basic behavior of radiator elements and measurement results. Feb 1939. 54p diagrs Mi $2.75 Ph $7.50

Translation of PB 37315

Legends in German

Closely following Part Report I, the basic behavior of radiator elements in the whole range of flow capacity is investigated theoretically, especially with regard to the influence of the free air-flow-cross-section and of the weight. The results of measurements obtained from a series of new radiator elements are given and discussed. Micro GDC 10/1066T, translation

PB 36143t

Melkus, H.

Ergenisse von messungen an gegenlaufschraulen. (Results of measurements on counter-rotating airscrews). Jun 1944. 84p drawings, diagrs Mi $3.75 Ph $11.25

Translation of PB 36143

Legends in German

Results of measurements on counter-rotating airscrews are reported on which were carried through in the 5 x 7 m. DVL wind tunnel on a pair of coaxial, two-bladed, adjustable and streamlined model airscrew, rotating at the same speed and measuring 2.4 in. Within a propeller modulus range of $0 \leq \lambda \leq 1.4$ ten blade angles were fully tested at equal blade adjustment ($B_v = \beta_h$) and eleven angles with unequal blade adjustment ($B_v = \beta_h$). The results were compared with corresponding values arrived at for a two bladed and a four-bladed single-acting airscrew characterized by similar contour and profile. In addition, the behavior of a counter-rotation system with a forward airscrew fixed in feathering position $\beta\sigma_v = 86°$ was investigated at four blade-adjustments in the range $0 \leq \lambda \leq 1.4$ and compared with a two-bladed single propeller. The Reynolds numbers uniformly chosen for all tests lie within the limits of $1.25 \times 10^6 \geq$ Re $0.7R \geq 0.87 \times 10^6$ and the Mach numbers, based on the blade tip, in the range $0.38 \geq Ma \geq 0.2$. ZWB FB 1950, translation

PB 96131

Möller Öhmichen & Co., Hamburg, Ger.

Testing of distributor pump chambers 601-10, 18 101 292/2. n.d. 7p diagrs Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Pumps, Distributor—Chambers—Germany 3. RTP/TIBT, translation 4. Micro GDC 11/133T, translation

PB 96145

Multhopp, H.

The lateral force set up at an airscrew subjected to an oblique incident flow. n.d. 13p diagrs Mi $1.75 Ph $2.50

Legends in German

A new formula is derived to express the lateral force acting on an airscrew subjected to an oblique incident flow, this force playing an important part in the consideration of the question of the stability of an aircraft. The formula gives results which correspond more closely to the available experimental results than those found using any of the already existing theories. Some actual figures are given for various present-day standard airscrews. Micro GDC 16/50T, translation

PB 95860

Nordström, H. F.

Propellers with adjustable blades. Results of model experiments. 1945. 32p tables, drawings Mi $2.25 Ph $5.00

1. Propeller blades, Adjustable 2. Sweden. Statens Skeppsprovningsanstalt. Meddelande No. 4. 1945.

PB 96156

Pabst (Herr)

Application of the calculation methods used for single stage axial blowers to multi-stage blowers. n.d. 11p graphs Mi $1.75 Ph $2.50

Legends in German

Parts of this report probably will not reproduce well

1. Thermodynamics—Germany 2. Blowers, Axial—Germany 3. Gt. Brit. Ministry of Supply 4. Micro GDC 16/18T, translation 5. RTP/TIBT, translation

PB 36131t

Regenscheit, B.

A variable—flow venturi nozzle. 1945. 20p illus, drawings, diagrs Mi $1.75 Ph $2.50

Translation of PB 36131

Legends in German

The report deals with measurements made on three nozzles with the airflow regulated by suction at the trailing edge of the nozzle. It was found possible to vary the amount of air flowing through the nozzle over a wide range. Such nozzles could be used in certain cases for encased air-screws. Experiments in this direction have been prepared. ZWB FB 1945, translation

PB 96207

Russwurm (Dr.)

Verneblerduse für sonderstoff. (A spray nozzle for special fuels). Apr 1944. 36p photos, drawing, graph Mi $2.25 Ph $5.00

Legends in German

1. Gt. Brit. Ministry of Supply 2. Nozzles, Fuel—Germany 3. Nozzles, Liquid spray—Germany 4. Micro GDC 3E/4T, translation

PB 23964t

Sanner, W.

Ein neuer gemischregler für flugmotoren. (A new mixture regulator for aero engines). n.d. 31p photo, diagrs, tables Mi $2.25 Ph $5.00

Translation of PB 23964

Legends in German

The mode of action shown by various pendulum designs in torsionally-vibrating systems is investigated at a special test-stand and with running engines. In continuous runs up to 250 hours the strength of the pendulum is tested. Micro GDC 10/1315T, translation

PB 36485t

Sauer, G.

Zur theorie der ebenen und kugelsymmetrischen explosion. (On the theory of two-dimensional and spherically—symmetrical explosion). May 1944. 23p diagrs Mi $2.00 Ph $3.75

Translation of PB 36485

Legends in German

A comprehensive analysis of the theory of two-dimensional and of spherically symmetrical explosion, firstly in the approximate form of the homogeneously varying gas cloud, and secondly with rigorous consideration of the reciprocating rarefaction and compression waves, by the methods of gas dynamics. ZWB FB 1957, translation

PB 96508

Schilhansl, Max

Ermittlung der niedrigsten biegeeigenfrequenz von geblasechaufeln. (Determination of the lowest natural frequency of blower rotor blades). May 1942. 27p Mi $2.00 Ph $3.75

Communication of the Deutschen Akademie der Luftfahrtforschung, no. 1

1. Rotor blades—Tests—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 10/10312T, translation

PB 36564t

Schoppe, G.

Vorversuche über die autorotation der genenlaufigen tragschraube. (Preliminary experiments on the auto-rotation of the counter-rotating lifting screw). Dec 1937. 11p photos, graphs, tables Mi $1.75 Ph $2.50

Translation of PB 36564

Legends in German

Preliminary tests were carried out on a model placed at our disposal by the Rieseler & Co Apparatebau in the DVL small wind tunnel, with a view to ascertaining the auto-rotation of a counter-rotating airscrew. The experiments are mainly based on axial (vertical) flow and should serve to provide fundamental data for the auto-rotation of a counter-rotating lifting screw. ZWB FB 895, translation

PB 96166

Schorn (Herr)

Flugleistungen und kuhlleistungen TA 154 V 10 mit jumo 213 A-1. (The flying performance and cooling of the TA 154 V 10 with Jumo 213 A-1). Jul 1944. 8p diagrs Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Partial Title: TA 154 V 10 with Jumo 213 A-1 (Airplanes) 3. Flight test recorders—Germany 4. Engines, Aircraft—Cooling—Germany 5. Micro GDC 16/1348T, translation

PB 96215

Schüle (Herr)

Test report 10 18 101 292 (group 1) on the testing of distributor pump chambers. Jan 1940. 5p chart Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Möller, Ohmichen & Co., Hamburg, Ger. 3. Chambers, Distributor pump—Tests—Germany 4. RTP/TIBT 5. Micro GDC 11/134T, translation

PB 96222

Seiler, E.

Ausnutzung der abgase einer brennkraft maschine zum vortrieb eines Luftfahrzeuges. (The utilisation of the exhaust gases of a combustion engine to provide the propulsive power for aircraft). Nov 1941. 6p drawings Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Exhaust gases—Utilization—Germany 3. Engines, Combustion—Exhaust gases—Utilization—Germany 4. Aircraft—Propulsion—Germany 5. RTP/TIBT 6. Micro GDC 3E/18T, translation

PB 96173

Ullmann—Senker.

Increasing the revolutions of aero-engines. n.d. 115p fold diagrs Mi $4.75 Ph $15.00

Legends in German

1. Engines, Aircraft—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 10/5564T, trans.

PB 95028

Vereinigte Deutsche Metallwerke A. G., Frankfurt am Main, Ger.

Beschreibung, bedienungs-, einlau- und wartungsvorschrift für VDM-verstelluftschrauben mit elektrischer Betätigung. (Description, installation, operation and maintenance instructions for VDM controllable pitch propellers). 1939. 180p illus, drawings (Text in German) Mi $6.50 Ph $22.50

1. Propellers—Germany

PB 96504

Weise, A.

Überschallaxialverdichter. (Supersonic axial compressor). Oct 1943. 29p photos, drawings, diagrs Mi $2.00 Ph $3.75

Legends in German

Parts of this report may not reproduce well

1. Compressors, Axial—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 10/6116T, translation

PB 96068

Westphalen (Herr) and Dornier (Herr)

Torsional and bending oscillation examination of the rear power unit installation of project DO 335. Apr 1943. 9p charts Mi $1.25 Ph $1.25

Translation from the German

Legends in German

1. Gt. Brit. Ministry of Supply 2. Crankshafts—Germany 3. Shafts, Propeller—Germany 4. Oscillations, Torsional—Germany 5. Drives, Universal—Germany 6. RTP/TIB 7. Micro GDC 11/94T, translation

Operations

PB 96056

Blohm (Herr) and Voss (Herr)

Prototype flying test and acceptance flying test of BV 222—VI: Heating and de-icing data. Aug 1942. 15p fold drawing, charts Mi $1.75 Ph $2.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Airplanes—De-icing—Germany 3. Micro GDC 23/182T, translation

PB 96053

Blohm and Voss, K. G., Hamburg, Ger.

Service experience with the BV. 222 flying boat, Series V. Jan 1943. 85p photos, drawings Mi $3.75 Ph $11.25

1. Flying boats—Tests—Germany 2. BV-222 (Flying boat) 3. Gt. Brit. Ministry of Supply 4. RTP/TIBT 3151, trans 5. Micro GDC 23/61T, trans.

PB 96162

Gt. Brit. Ministry of Supply.

Further possibilities of the Warschau-Süd. Part I. As launching aid (reciprocal Mayo-Composite). Part II. Fuelling in the air as indirect launching aid. Sep 1941. 25p diagrs Mi $2.00 Ph $3.75

Diagrams may not reproduce well

Legends in German

1. Warschau-Süd (reciprocal Mayo-Composite) 2. Aircraft—Launching—Germany 3. Micro GDC 3E/71T, translation

PB 95862

Harrell, Hunter H.

Operational suitability test of the H. O. 249 star tables for air navigation. Nov 1948. 23p tables Mi $2.00 Ph $3.75

1. Navigation, Aerial 2. Tables, Navigational 3. APGC Proj 4484-5

PB 96244

Schugt (Herr) and Maruhn (Herr)

Researches on pursuit-curves. Jan 1936. 12p graphs Mi $1.75 Ph $2.50

1. Airplanes, Fighter—Aerodynamics—Germany 2. Pursuit curves—Germany 3. Germany. Luftfahrtforchungsanstalt R. BIOS HEC 10723 5. ZWB FB 542, trans.

PB 96216

Schweiger (Herr)

Me 109G improvement of flying qualities (reduction of control forces, etc.). May 1942. 6p drawings, charts Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Airplanes—Yawing—Germany 3. Rudders, Aircraft—Controls—Germany 4. Ailerons—Speed—Germany 5. RTP/TIBT 6. Micro GDC 15/144T, translation

PB 96228

Seitz (Herr)

Performance calculations for glider trains. Feb 1941. 9p Mi $1.25 Ph $1.25

1. Gt. Brit. Ministry of Supply 2. Glider trains—Performance calculations—Germany 3. RTP/TIBT, translation 4. Micro GDC 15/622T, translation

PB 96174

Tilch

Response in aileron actuation. Jul 1943. 10p charts Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Ailerons—Deflection—Germany 3. RTP/TIBT 4. Micro GDC 15/146T, translation

PB 95036

U. S. Air Force and U. S. Bureau of Aeronautics.

Flight operating instructions for USAF series B-17G aircraft. Mar 1948 24p photos, drawings, tables Mi $2.00 Ph $3.75

1. Pilots handbook 2. Airplanes—Operation

PB 95068

U. S. Air Force and U. S. Bureau of Aeronautics.

Handbook: Flight operating instructions for USAF series OA-10A aircraft. Jun 1948. 25p photos, drawings, graphs, tables Mi $2.00 Ph $3.75

1. Pilots handbook

PB 95052

U. S. Air Force.

Lockheed: Flight restrictions—F-80C (P-80C), Jul 1948. 1p Mi $1.25 PH $1.25

1. Engines, Aircraft—Failure

PB 95905

Wood, John A. and Mahoney, David I.

Efficacy of standard bailout equipment in effecting emergency descents from an altitude of 50,000 feet. Nov 1948. 8p illus, table Mi $1.25 Ph $1.25

1. Aeronautical equipment 2. AAF TSEAA MR 696-107F

Maintenance and Repair

PB 96052

Gt. Brit. Ministry of Supply.

BV 222 Servicing and maintenance instructions. Feb 1944. 145p photos, drawings, tables Mi $5.75 Ph $18.75

1. Flying boats—Tests—Germany 2. BV 222 (Flying boat) 3. RTP/TIBT 3025, trans. 4. Micro GDC 23/105T, trans.

—82288

PB 47254r3

U. S. Air Forces and U. S. Bureau of Aeronautics.
Erection and maintenance instructions: Model C-117A airplanes. Feb 1948. 3p photo, diagrs Mi $1.25 Ph $1.25
I. AAF TO 01-40NE-2, rev. 3

PB 46986r7

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, erection and maintenance instructions: USAF series B-24J-1, -5, -10, -20, -25, -30, -35NC and navy model PBJ-1J aircraft. Jun 1948. 14p photos, drawings, tables Mi $1.75 Ph $2.50
I. AAF TO 01-60GE-2, rev. 7

PB 46986r5

U. S. Air Force and U. S. Bureau of Aeronautics.
Erection and maintenance instructions for USAF series B-25J-1, -5, -10, -15, -20, -25, -30, -35NC, navy model PBJ-1J aircraft. Jan 1948. 13p photos, drawings, tables Mi $1.75 Ph $2.50
I. AAF TO 01-60GE-2, rev. 5

PB 41648r4

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook: Erection and maintenance instructions, USAF models P-51D, P-51K and P-51M aircraft. Dec 1947. 14p photos, drawings, tables Mi $1.75 Ph $2.50
Revision 4 of PB 41648
I. AAF TO 01-60JE-2-4

PB 41279r4

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, erection and maintenance instructions: USAF series R-5A, R-5D, YR-5E, R-5F and navy model HO2S-1 helicopters. Mar 1948. 11p photos, drawings Mi $1.75 Ph $2.50
I. AAF TO 01-230HB-2, rev. 4

PB 62542r4

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, erection and maintenance instructions for USAF model YR-13 'YR-13) and navy models HTL-1 and HTL-2 helicopters. Jun 1948. 12p photo, drawings Mi $1.75 Ph $2.50
I. AAF TO 01-110HAA-2, rev.4

PB 42179r4

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook: Service and maintenance instructions. USAF models B-29 and B-29A aircraft. Dec 1947. Mi $1.75 Ph $2.50
Revision 1 of PB 42179
I. AAF TO 01-20EJ-2-4

PB 41298r5

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, service and maintenance instructions: USAF model C-82A aircraft. Oct 1947. 5p table Mi $1.25 Ph $1.25
I. AAF TP 01-115CBA-2, rev. 4

PB 47032r2

U. S. Air Force and U. S. Bureau of Aeronautics
Handbook, structural repair: USAF models AT-7, AT-7C, C-45B and C-45F; navy models SNB-2, SNB-3, JRB-3 and JRB-4 aircraft. Dec 1947. 3p drawings Mi $1.25 Ph $1.25
Revision 2 of PB 47032
I. AAF TO 01-90-3-2

PB 41299r3

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, structural repair instructions: USAF model C-82A aircraft. Jan 1948. 17p drawings Mi $1.75 Ph $2.50
I. AAF TO 01-115CBA-3-3

PB 42290r

U. S. Air Force.
Handbook, structural repair instructions: USAF model P-47 series aircraft, Dec 1947. 7p drawings Mi $1.25 Ph $1.25
I. AAF TO 01-65B-3-1

PB 55548r4

U. S. Air Force and U. S. Bureau of Aeronautics.
Handbook, structural repair instructions: USAF model YR-13 and navy models HTL-1, HTL-2 helicopters. Apr 1948. 72p photos, drawings, tables Mi $3.50 Ph $10.00
I. AAF TO 01-110HA-3, rev. 4

PB 39695s

U. S. Air Force.
Inspection manuals: AF supply and maintenance inspection manual. Apr 1948. 1p Mi $1.25 Ph $1.25
I. AAF TO 00-15-1A, supp.

PB 95033

U. S. Air Force.
Lockheed: Inspection and lubrication instructions for turbine and cooler assembly, part No. 19728—P-80A, and P-80B. Jun 1948. 2p Mi $1.25 Ph $1.25
I. Turbines—Lubrication 2. Cooling systems—Inspection

PB 95051

U. S. Air Force.
Republic: Inspection and lubrication instructions for turbine unit, model No. 52021—YP-84A and P-84B. Jun 1948. 2p Mi $1.25 Ph $1.25

PB 62650r5

U. S. Air Force.
USAF aircraft and related airborne equipment inspection and maintenance system. May 1948. 23p Mi $2.00 Ph $3.75
I. AAF TO 00-20A-5

PB 65965r

U. S. Army Air Forces.
Aircraft inspection and maintenance guide for C-82 series aircraft. Jun 1947. 20p tables Mi $1.75 Ph $2.50
1. AAF TO 00-20A-2-C-82, rev.

PB 65965r2

U. S. Army Air Forces.
Aircraft inspection and maintenance guide for C-82 series aircraft. Aug 1947. 21p tables Mi $2.00 Ph $3.75
1. AAF TO 00-20A-2-C-82, rev.2

PB 55548r3

U. S. Army Air Forces and U. S. Bureau of Aeronautics.
Handbook, structural repair instructions: USAF series YH-13 (YR-13), H-13B (R-13B) and navy models HTL-1, HTL-2, helicopters. Jul 1948. 72p photos, drawings Mi $3.50 Ph $10.00
1. AAF TO 01-110HA-3, rev.3

PB 62539s

U. S. Army Air Forces.
List of applicable publications: C-82A aircraft and equipment. Sep 1947. 10p tables Mi $1.25 Ph $1.25
1. AAF TO 01-115CBA-01A, supp.

PB 39684r

U. S. Army Air Forces.
Aircraft inspection and maintenance guide for R-5 model helicopter. Jul 1947. 16p tables Mi $1.75 Ph $2.50
1. AAF TO 00-20A-2-R-5, rev.

PB 48294r

U. S. Army Air Forces.
Aircraft inspection and maintenance guide for RP-63 aircraft, Jul 1947. 20p tables Mi $1.75 Ph $2.50
1. AAF TO 00-20A-2-RP-63, rev.

PB 46907

U. S. Army Air Forces.
Erection and maintenance instructions for Army model AT-11. Navy model SNB-1 airplanes. 20 June 1944. (Basic T.O.). 148p drawings, photos Mi $5.75 Ph $18.75
Pages in future revisions supersede and replace pages having same numbers
1. AT-11 (Airplane) 2. SNB-1 (Airplane) 3. Airplanes, Trainer 4. Airplanes, Trainer—Maintenance and repair 5. AAF TO 01-90KC-2

PB 46907r

U. S. Army Air Forces.
Erection and maintenance instructions for Army model AT-11, Navy model SNB-1 airplanes. 15 July 1944. revision. 4p photo, drawing Mi $1.25 Ph $1.25

PB 46907r2

U. S. Army Air Forces.
Erection and maintenance instructions for Army model AT-11, Navy model SNB-1 airplanes. 20 Aug 1944 revision. 20p photos, drawings Mi $1.25 Ph $2.50

PB 46907r3

U. S. Army Air Forces.
Erection and maintenance instructions for army model AT-11, navy model SNB-1 airplanes. 30 Sep 1944 revision. 14p diagrs, photos Mi $1.75 Ph $2.50

PB 46907r15

U. S. Army Air Forces.
Erection and maintenance instructions for Army model AT-11, Navy model SNB-1 airplanes. 24 June 1947 revision. 4p Mi $1.25 Ph $1.25
1. AAF TO 01-90KC-2-15

PB 40732r7

U. S. Army Air Forces and U. S. Bureau of Aeronautics.
Handbook, erection and maintenance instructions: USAF series A-26B and A-26C aircraft. Jun 1948. 27p photos, drawings Mi $2.00 Ph $3.75
1. AAF TO 01-40AJ-2, rev. 7

PB 46907r4

U. S. Army Air Forces.
Handbook, erection and maintenance instructions: USAF model AT-11, Navy model SNB-1 aircraft. 15 Nov 1944 revision. 8p photo, diagr, drawing Mi $1.25 Ph $1.25

PB 41648r6

U. S. Army Air Forces and U. S. Bureau of Aeronautics.
Handbook, erection and maintenance instructions: USAF series F-51D (P-51D), ZF-51K (P-51K) and F-51M (P-51M) aircraft. Jun 1948. 10p photos, drawings, table Mi $1.25 Ph $1.25
1. AAF TO 01-60JE-2, rev. 6

PB 85311

U. S. Army Air Forces.
Set: Maintenance, bombardment type aircraft, flight test. Feb 1947. 3p tables Mi $1.25 Ph $1.25
1. Airplanes, Bomber—Maintenance and repair 2. AAF TO 00-30-1036

PB 40150r

U. S. Army Air Forces.
Set: Maintenancem field, aircraft radiator and cooler. Sep 1947. 2p table Mi $1.25 Ph $1.25
1. AAF TO 00-30-330-1

Airport and Airways

PB 94591

Donalson, D. C.

Comparative test of set, portable, field lighting (series), and set, portable, field lighting (series-series). Aug 1948. 31p photos, tables Mi $2.25 Ph $5.00

1. Airports—Lights 2. APGC Proj 34713-5

PB 37331r

U. S. Army Air Forces and others.

Handbook of instructions, with parts catalog: Portable field lighting set, specification AN-S-2. (Manufactured by Climax Engineering Co., Clinton, Iowa). Jan 1945. 16p photos, drawings, tables Mi $1.75 Ph $2.50

Revision 1 of PB 37331

1. Gt. Brit. Air Council of the United Kingdom 2. AAF TO 08-20-4-1

Aerodynamics

PB 96150

Becker (Herr) and Öhl (Herr)

Wind tunnel tests on a windmill model. Sep 1943. 3p diagrs, tables Mi $1.25 Ph $1.25

Legends in German

1. Gt. Brit. Ministry of Supply 2. Windmills—Wind tunnel tests—Germany 3. ZWB UM 1128, translation 4. Micro GDC 10/5175T, translation

PB 96782

Chapman, Dean R.

Laminar mixing of a compressible fluid. Feb 1949. 19p graphs Mi $1.75 Ph $2.50

A method is presented for calculating the velocity profiles for laminar mixing of a compressible-fluid stream with a region of fluid at rest. Velocity profiles are calculated for Mach numbers of 0, 1, 2, 3, and 5, using both a linear and a 0.76-power variation of viscosity with absolute temperature. NACA TN 1800

PB 96034

Drescher, H. and others.

D_1 model test technique. II. Test installations. Water tunnels: Cavitation tunnels: Roughness-tunnell of the Kaiser-Wilhelm-Institut fuer Stroemungsforschung at Goettingen: Cold tunnels of the AVA, Goetingen. Jul 1947. 67p drawings, graphs Mi $3.00 Ph $8.75

1. Tunnels, Water—Germany 2. Cavitation tunnels—Germany 3. Wind tunnels—Germany 4. Icing tunnels—Germany 5. Gt. Brit. Ministry of Aircraft Production 6. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 7. Micro GDC 435, trans.

—82288

PB 96784

Ferri, Antonio

Method for evaluating from shadow or schlieren photographs the pressure drag in two-dimensional or axially symmetrical flow phenomena with detached shock. Feb 1949. 15p diagrs Mi $1.75 Ph $2.50

A method using shadow or schlieren photographs has been developed for evaluating the pressure drag of axially symmetrical bodies at zero angle of attack or of two-dimensional bodies producing detached shock. The method can be applied to the determination of external drag and mass flow of supersonic inlets with subsonic flow at the entrance of the inlet. NACA TN 1808

PB 96807

Ferri, Antonio

The method of characteristics for the determination of supersonic flow over bodies of revolution at small angles of attack. Feb 1949. 53p diagrs Mi $2.75 Ph $7.50

The method of characteristics has been applied to rotational supersonic flow around bodies of revolution at a small angle of attack. The practical numerical calculations are similar to those for zero angle of attack. A method for determining supersonic flow around circular cones at an angle of attack is also given. NACA TN 1809

PB 96083

Göthert, B.

Pressure distribution diagrams for the NACA 230-15 profile at high sub-sonic velocities. Sep 1944. 38p diagrs (fold diagrs) Mi $2.25 Ph $5.00

Legends in German

1. NACA 230-15 (Profile) 2. Aerodynamics—Germany 3. Wing profiles—Measurements—Germany 4. Profiles—Pressure distribution—Germany 5. Deutsche Versuchsanstalt für Luftfahrt, E. V., Institut für Aerodynamik, Berlin 6. Gt. Brit. Ministry of Supply 7. Micro GDC 10/5222T, translation

PB 96093

Gothert, R.

Dreikomponentenmessungen und strommungsaufnahmen an flügeln mit verschiedenen endkappen. (Three-component measurements and flow photographs of wings with various end caps). Apr 1941. 23p fold diagrs, tables Mi $2.00 Ph $3.75

Legends in German

1. Gt. Brit. Ministry of Supply 2. Wing profiles—Photography—Germany 3. Wing tips—Germany 4. Air flow—Photography—Germany 5. Micro GDC 10/3040T, translation

PB 96085

Gt. Brit. Ministry of Supply.
The theoretical development of the FW 190 airframes for high critical mach numbers. Nov 1941. 25p diagrs Mi $2.00 Ph $3.75
Legends in German
1. Mach numbers—Effects—Germany 2. FW 190 (Airframes) 3. Airframes—Tests—Germany 4. Micro GDC 16/19T, translation

PB 96108

Gt. Brit. Ministry of Supply.
Wing drag with extended flaps. n.d. 16p graphs, tables Mi $1.75 Ph $2.50
Legends in German
Parts of this report may not reproduce well
1. Drag, Profile—Germany 2. Drag, Wing—Germany 3. Flaps, Aircraft—Drag—Germany 4. RTP/TIBT, translation 5. Micro GDC 15/119T, translation

PB 96098

Helmbold, Heinrich
Über einige ergebnisse aus der aerodynamischen industrieforschung. (On some results of aerodynamic research in industry). Sep 1942. 10p diagrs Mi $1.25 Ph $1.25
In D.A.L. Yearbook 1942/43
Legends in German
1. Aerodynamics—Research—Germany 2. Gt. Brit. Ministry of Supply 3. RTP/TIBT, translation 4. Micro GDC 3E/22T, translation

PB 96038

Hildenbrand, E. and Walz, A.
Methods of construction for wind tunnel models investigated at low Mach numbers: Profile systematics. Mar 1947. 28p drawings Mi $2.00 Ph $3.75
1. Wind tunnels—Design—Germany 2. Profiles—Pressure distribution—Germany 3. Gt. Brit. Ministry of Aircraft Production 4. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 5. Micro GDC 749, trans.

PB 96090

Hoerner (Dr.)
Calculation of the three-dimensional aerofoil. Dec 1941. 30p drawings, diagrs (1 fold diagr) table Mi $2.00 Ph $3.75
Legends in German
Parts of this report may not reproduce well
1. Airfoils—Aerodynamics—Germany 2. Gt. Brit. Ministry of Supply 3. Micro GDC 15/466T, trans.

PB 96114

Hoerner (Dr.)
Formula for speed and drag variations. Feb 1944. 11p diagrs, tables Mi $1.75 Ph $2.50
Legends in German
1. Airplanes—Speed—Measurements—Germany 2. Gt. Brit. Ministry of Supply 3. RTP/TIB, trans. 4. Micro GDC 15/236T, trans.

PB 96757

Imai, Isao and Hasimoto, Hidenori
Application of the W.K.B. method to the flow of a compressible fluid, II. n.d. 17p diagrs Mi $1.75 Ph $2.50
1. Flow, Compressible—Measurements—Japan 2. Flow, Compressible—Theory—Japan 3. Aerodynamics—Japan

PB 96349

Ingelstam, Erik and Malderyd, Karl-Erik.
Studier rörande läverkan. (Studies of different types of wind). 1947. 13p photos, diagrs (Text in Swedish) Mi $1.75 Ph $2.50
1. Winds—Research—Sweden 2. Svenska. Statens Kommitte för Byggnadsforskning. Meddelanden. 12

PB 96755

Konob, Kazuo
On the general theory of the curved tension field. Jun 1943. 4p Mi $1.25 Ph $1.25
Reprinted from the Journal of the Society of Aeronautical Science of Nippon, v. 10, no. 98, June 1943
1. Aerodynamics—Japan 2. Mathematics, Applied—Japan 3. Stress analysis

PB 96107

Krettner (Dr.)
Dynamic longitudinal stability with allowance for downwash retardation and thrust moment. Aug 1942. 18p drawings Mi $1.75 Ph $2.50
Legends in German
Parts of this report may not reproduce well
1. Stability, Longitudinal—Germany 2. Stability—Calculations—Germany 3. Gt. Brit. Ministry of Supply 4. Micro GDC 15/129T, translation

PB 96040

Krüger, W. and Walz, A.
Forces, moments and stability of the aerofoil with high-lift devices: Boundary layer control to the straight and swept-back aerofoil in three-dimensional flow: Aerodynamical and structural problems of the application of Boundary layer control to the aeroplane. May 1947. 104p Mi $4.50 Ph $13.75
1. Airfoils—High lift devices—Germany 2. Airfoils—Boundary layer—Germany 3. Gt. Brit. Ministry of Aircraft Production 4. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 5. Micro GDC 900, trans.

PB 96037

Ludwieg, H. and others.

High-speed wind tunnels of the AVA with steam jet drive diameter 0.765m: Supersonic wind tunnel 0.250 x 0.250m^2 of the AVA: High speed tunnels A6 and A7 of the LFA Brunswick: High speed wind tunnel A9 of the LFA Brunswick: Free suspension in a magnetic field with reference to its possible application for high speed flight measurements along rails: High-speed wind tunnel (3m diam.) of the Luftfahrtforschungsanstalt, Munch (LFM). Jul 1947. 85p drawings, graphs Mi $3.75 Ph $11.25

I. Wind tunnels, High speed—Germany 2. Gt. Brit. Ministry of Aircraft Production 3. Aerodynamische Versuchsandstalt Göttingen, E. V., Göttingen, Ger. 4. Micro GDC 755, trans.

PB 96035

Ludwieg, H. and Scherer, A.

Wind-tunnel corrections for compressible flow: Measurements of pressure distribution. Jun 1947. 27p drawings, diagrs Mi $2.00 Ph $3.75

I. Wind tunnels—Corrections—Germany 2. Pressure, Air—Measurements—Germany 3. Gt. Brit. Ministry of Aircraft Production 4. Aerodynamische Versuchsanstalt Göttingen, E.V., Göttingen, Ger. 5. Micro GDC 748, translation

PB 96191

Puffert (Mr.)

Tail unit drag. Mar 1942. 9p drawings, table Mi $1.25 Ph $1.25

I. Gt. Brit. Ministry of Supply 2. Wind tunnel tests—Germany 3. Airplanes—Drag—Germany 4. Title: Tail unit drag 5. Messerschmitt, A. G. 6. Micro GDC 15/118T, abstract 7. RTP TIBT 3146

PB 96213

Riegels, F. W.

The aerofoil profile. Feb 1947. 19p photos Mi $1.75 Ph $2.50

I. Water tunnels—Hydronamics—Germany 2. Wind tunnel tests—Germany 3. Profiles—Pressure distribution 4. Airfoils—Compressibility effects—Germany 5. Flow, Compressible—Germany 6. Airfoils—Boundry layer—Germany 7. Wings—Boundary layer—Germany 8. Micro GDC /646T, translation

PB 96212

Riegels, F. W.

The pressure distribution along an aerofoil profile. Feb 1947. 68p drawings, graphs, tables Mi $3.00 Ph $8.75

I. Profiles—Pressure distribution 2. Micro GDC /635T, translation

PB 96036

Riegels, F. W.

Wind-tunnels corrections for incompressible flow. June 1947. 65p graphs Mi $3.00 Ph $8.75

I. Wind tunnels—Corrections—Germany 2. Gt. Brit. Ministry of Aircraft Production 3. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 4. Micro GDC 750, trans.

PB 96208

Ritter (Mr.)

Dreikomponentenmessungen an der Feuerlilie "F 25" 2.8m hochgeschwindigkeitskanel der L F A. (Three-component measurements on the Feuerlilie F 25 in the LFA 2.8m high speed wind tunnel). Jan 1944. 33p Mi $2.25 Ph $5.00

This report may not reproduce well

Legends in German

I. Gt. Brit. Ministry of Supply 2. Wind tunnel tests—Germany 3. ZWB UM 2079, translation 4. Micro GDC 10/5655T, translation

PB 96172

Schwenk, Th.

Three-component measurements on a rectangular aerofoil with various types of flaps and ailerons. Jun 1947. 56p drawings, diagrs, tables. Mi $2.75 Ph $7.50

I. Profiles—Measurements—Germany 2. Airfoils—Measurements—Germany 3. Gt. Brit. Ministry of Aircraft Production 4. Micro GDC/906T, trans.

PB 96171

Seiferth, R.

Aerodynamic coefficients of the aerofoil. (Without high-lift devices). May 1947. 64p diagrs, drawings, table Mi $3.00 Ph $8.75

I. Airfoils—Aerodynamics—Germany 2. Airfoils—Characteristics—Germany 3. Aerodynamische Versuchsanstalt Göttingen, E.V., Göttingen, Ger. 4. Gt. Brit. Ministry of Aircraft Production 5. Micro GDC 901T, translation

PB 96039

Seiferth, R. and others.

System of reference for six-component measurements: Rolling-moment balances: Problems as to experimental practice for wind-tunnel experiments with boundary layer. May 1947. 43p drawings, tables Mi $2.50 Ph $6.25

I. Flight measurements—Germany 2. Airplanes—Spinning—Germany 3. Wind tunnels—Testing equipment—Germany 4. Gt. Brit. Ministry of Aircraft Production 5. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 6. Micro GDC 944, trans.

PB 96708

Steiner, Margaret F.

Comparison of over-all impact loads obtained during seaplane landing tests with loads predicted by hydrodynamic theory. Jan 1949. 47p photos, charts, tables Mi $2.50 Ph $6.50

Experimental over-all loads obtained during full-scale landings are compared with hydrodynamic impact theory. The experimental data, for the case where only the V-shape portion of the forebody was immersed, were in agreement with computed values; whereas for the case where the transverse curvature of the chine flare was immersed, the experimental maximum loads were considerably greater than the computed values. Downward rotation in pitch resulted in a reduction in the loads in the early stages of an impact, but no corresponding reduction in the maximum load. NACA TN 1781

PB 96198

Strassl, H.

Three component measurements of short cylinders at supersonic speeds. Jun 1943. 3p graphs Mi $1.25 Ph $1.25

Legends in German

This report may not reproduce well

1. Gt. Brit. Ministry of Supply 2. Velocity, Ultrasonic—Germany 3. Wind tunnel, Supersonic—Testing equipment—Germany 4. ZWB UM 3003, translation 5. Micro GDC 10/5869T, translation

PB 96728

Tetervin, Neal

Remarks concerning the behavior of the laminar boundary layer in compressible flows. Jan 1949. 20p Mi $1.75 Ph $2.50

With the usual assumptions of boundary-layer theory, the separation point of the steady compressible laminar boundary layer is independent of Reynolds number when the ratio of the local to the free-stream velocity and the ratio of the local to the free-stream temperature at all points on the surface of a body and at the outer edge of its boundary layer, and the Mach number, and the physical properties of the gas do not change with Reynolds number. For the same conditions the boundary-layer thickness is inversely proportional to the square root of the Reynolds number. The separation of the laminar boundary layer occurs only when the static pressure along the surface rises in the direction of the flow. NACA TN 1805.

PB 96707

Thompson, Jim Rogers

A rapid graphical method for computing the pressure distribution at supersonic speeds on a slender arbitrary body of revolution. Jan 1949. 24p charts, tables Mi $2.00 Ph $3.75

Presents a method by which the pressure distribution on an arbitrary body of revolution at zero angle of attack moving at supersonic speeds may be calculated at an appreciable saving of time over other methods. The method was developed from the linearized equations of Jones and Margolis and is essentially a graphical computing technique based on the assumption that the body may be represented by a small number of point sources and sinks. Examples are included and computed pressure distributions are compared with theoretical and experimental results. NACA TN 1786

PB 96179

Walchner (Mr.)

Report on the position with regard to the special study of high speed problems delivered before the special committee on wind tunnels 5-1-44. Jan 1944. 6p Mi $1.25 Ph $1.25

Translation from the German

This report may not reproduce well

1. Gt. Brit. Ministry of Supply 2. Wind tunnels, High speed—Germany 3. Profiles—Measurements—Germany 4. Aerodynamics—Germany 5. Wings—Wind tunnel tests—Germany 6. Micro GDC 10/9170T, translation

PB 96188

Walz, A.

The aerofoil profile; The polars, comparison between theory and measurement; Experimental profile investigations without influence on the boundary layer (at usual velocities). Mar 1947. 42p diagrs, graphs, tables Mi $2.50 Ph $6.25

1. Profiles—Research—Germany 2. Profiles—Theory—Germany 3. Aerodynamics—Germany 4. Gt. Brit. Ministry of Aircraft Production 5. Aerodynamische Versuchanstalt. Göttingen, E. V., Göttingen, Ger. 6. Micro GDC/519T, trans.

PB 96169

Walz, A. and Hansen, M.

Experimental technique on models, on the technique of drag measurement according to Betz' momentum method: Mass measurements by means of throttle instruments. May 1947. 60p drawings, diagrs, graphs Mi $2.75 Ph $7.50

1. Drag—Measurements—Germany 2. Measurements—Germany 3. Instruments, Measuring—Germany 4. Gt. Brit. Ministry of Aircraft Production 5. Aerodynamische Versuchsanstalt Göttingen, E. V., Göttingen, Ger. 6. Micro GDC 746T, translation

PB 96182

Wieghardt, K.

Uber das ausblasen von warmluft für enteiser. (On the blowing of warm air for de-icing-devices). Nov. 1946. 42p charts Mi $2.50 Ph $6.25

Translation from the German

1. Kaiser Wilhelm Institut für Strömungsforschung, Göttingen, Ger. 2. De-icing equipment—Germany 3. Airplanes—Icing prevention—Germany 4. Airfoils—Boundary layer—Germany

PB 96180

Winter, (Dr.)

An appraisal of the utility of laminar profiles. Apr 1940. 14p fold charts Mi $1.75 Ph $2.50

A translation from the German

1. Gt. Brit. Ministry of Supply 2. Wing, Profiles—Laminar—Germany 3. Wing profiles—High speed tests—Germany 4. Wings—Aerodynamics—Germany 5. Wings—Drag—Germany 6. RTP/TIBT 7. Micro GDC 15/227T, translation

PB 96177

Zobel, Th.

Über einige Ergebnisse mit dem Interferenzverfahren im Hochgeschwindigkeitswindkanal der LFA. (Some results of the optical interference method in the high speed tunnel of the LFA). Feb 1947. 24p photos, charts Mi $2.00 Ph $3.75

Translation from the German

This report may not reproduce well

1. Air flow, High speed—Germany 2. Wind tunnels, High speed—Germany 3. Aerodynamics—Germany

Rockets and Jet Propulsion

PB 96048

Bangerter, H.

On problems of increasing the thrust of combined jet/airscrew power units, by increasing the reaction thrust, a method for rapid determination of optimum thrust conditions. Apr 1944. 32p graphs Mi $2.25 Ph $5.00

1. Jet engines—Thrust—Germany 2. Gt. Brit. Ministry of Supply 3. RTP/TIBT 3187, trans. 4. Micro GDC 3E/8, trans.

PB 96086

Gt. Brit. Ministry of Supply.

The design of lorin power units, Part II. Apr 1944. 38p graphs Mi $2.25 Ph $5.00

Legends in German

1. Jet engines, Lorin—Germany 2. Micro GDC 16/23T, translation 3. RTP/TIBT, translation

PB 96105

Hornung (Herr)

Comparison of the performance of jet propelled fighters. n.d. 22p graphs Mi $2.00 Ph $3.75

Legends in German

Parts of this report may not reproduce well

A fighter with 2 TL jet units (Me 262) is compared with a single jet fighter; the latter is tested in standard (P 1092) and in tailless form. The aircraft to be tested are, as regards weight, based on the same specification for equipment and armament. Landing speed of the two single-jet fighters is the same, that of the Me 262 is 8 km/h higher. In the case of the single-engined standard aircraft the weight and aspect ratios were varied. A reduction in weight will give the same result with a tailless type; no alteration of aspect ratio was attempted in this case, as in view of the short time available the aerodynamic data of the Me 163B had to be maintained in all circumstances. Micro GDC 15/53T, translation

PB 96128

Koloska (Herr)

Model measurements on the JU.287 (jet aircraft). Aug 1944. 61p drawings, graphs, diagrs, tables Mi $3.00 Ph $8.75

Legends in German

The results of the third test period on the model of the JU.287 with two triple-TL-power units are given in this report to permit the assessment of the flight characteristics of the series. ZWB UM 7303, translation

PB 96147

Müller, M. A.

Axial TL-jet units and engine-jet units. Jan 1941. 6p diagr Mi $1.25 Ph $1.25

1. Gt. Brit. Ministry of Supply 2. Turbines, Gas—Germany 3. Micro GDC 10/5006T, translation

PB 96157

Pabst (Herr)

The design of Lorin jet propulsion units. Feb 1944. 41p graphs Mi $2.50 Ph $6.25

Legends in German

Parts of this report probably will not reproduce well

1. Jet propulsion units—Germany 2. Jet engines, Lorin—Germany 3. Gt. Brit. Ministry of Supply 4. RTP/TIBT, translation 5. Micro GDC 16/88T, translation

PB 39074t

Pabst (Herr)

The propagation of hot gas jets in moving air. Aug 1944. 32p drawing, charts Mi $2.25 Ph $5.00

Translation of PB 39074

Legends in German

Measurements concerned with the investigation of mixing processes of hot air jets in cold stationary and parallelly flowing air. In the first part of this report experiments are described which were intended to clarify those occurrences in the presence of an undisturbed core of the jet. ZWB UM 8004, translation

PB 96152

Pabst, O.

Der regelvorgang beim strahltriebserk am stand. (The governing of jet propulsion units in static tests). May 1942. 29p diagrs Mi $2.00 Ph $3.75

Legends in German

As a preliminary to tests on the Fw Tl propulsion unit and with the object of determining the take-off thrust, the governing of a jet-propulsion unit during static test is analyzed. In this connection the critical factor determining the persistence of the flame in a combustion chamber is defined in relation to the running speed of the rotor. Micro GDC 16/49T, translation

PB 96209

Rotta, J. and Göhme, H.

The ballistics of flight of jet-propelled aircraft. Oct 1943. 44p charts Mi $2.50 Ph $6.25

1. Gt. Brit. Ministry of Supply 2. Ballistics—Measurements—Germany 3. Jet propulsion—Tests—Germany 4. Flight tests—Germany 5. RTP/-TIBT 6. Micro GDC 16/68T, translation

PB 96214

Sahliger (Herr)

Calculation methods for estimating flight performance, Part III. Graphic methods for jet propelled aircraft. 1942. 13p charts Mi $1.75 Ph $2.50

Legends in German

1. Gt. Brit. Ministry of Supply 2. Aircraft, Jet-propelled—Germany 3. Aircraft, High—Speed—Germany 4. Velocity—Measurements—Germany 5. RTP/TIBT 6. Micro GDC 15/71T, translation

PB 36486t

Sanger, A.

The suitability of Lorin jet propulsion for pilotless aircraft. Feb 1944. 10p diagrs Mi $1.25 Ph $1.25

Translation of PB 36486

Legends in German

This paper links up with the considerations laid down in the book "The Technique of Rocket Flight, Volume II" using the same notation, and expands the results there obtained on the problem of the suitability of a regulable Lorin drive for piloted fighter and bomber aircraft to the application of non-regulable Lorin drive in pilotless horizontally propelled aircraft. Particular attention is given to the question of optimum dimensions of the power plant and wing unit, optimum flying height, and speed of flight, and attainable range with given fuel supply. ZWB FB 1958, translation

PB 96227

Sänger, E.

High gas discharge velocities in rocket propulsion. Nov 1946. 21p charts Mi $2.00 Ph $3.75

The problems of the discharge velocity of combustion gases, dealt with in the present report, are founded on a number of accepted tenets of the theory of rocket flight, but forsake this safe foundation, in order to gain an insight into the further, possible directions of rocket propulsion research, which might be of interest in the present connection. The analysis, which in part leads into regions far removed from the present scope of practical experience, arrives at the following conclusions:- All, and particularly the aeronautical, applications of rocket drive, lead to the requirement of higher discharge velocities. The means to this end are: The use of fuels with a particularly high energy content, high combustion temperatures, and high gas pressures in the combustion chamber. Practical limits for the application of these means are set by the thermal and mechanical stressing of the rocket motor; however, these limits are so high, that discharge velocities up to 5000 m/sec. are possible. ZWB FB 829, translation

PB 96257

Weinig, F.

Flying mechanics of the jet-propulsion-engine. May 1945. 44p drawings, graphs Mi $2.50 Ph $6.25

1. Jet engines—Performance—Germany 2. Germany. Luftfahrtforschung 3. BIOS HEC 21

Land Transportation

PB 94668

Bayerische Motoren Werke A. G., Munich, Ger.

Ersatzteilliste für die Krafträder BMW 500/251 (R51) sport, 600/266 (R66) sport, 600/261 (R61) touren, 750/271 (R71) touren. Oct 1942. 40p tables Mi $2.25 Ph $5.00

1. Motorcycles—Maintenance and repair—Germany

PB 94669

Bayersiche Motoren Werke A. G., Munich, Ger.

Ersatzteilliste für die BMW Krafträder F 20—200 ccm R 23—250 ccm. Mar 1941. 33p tables Mi $2.25 Ph $5.00

1. Motorcycles—Maintenance and repair—Germany

PB 49278s

Bayerische Motoren Werke A. G., Munich, Ger.

German motorcycle industry in the British and U.S.A. zones of occupation. May 1936. 20p drawing only Mi $1.75 Ph $2.50

Legends in German

Supplement to PB 49278

1. Motorcycles—Manufacture—Germany 2. BIOS FR 620, Item 19, Supp. 1

PB 49278s2

Bayerische Motoren Werke A. G., Munich, Ger.

German motorcycle industry in the British and U.S.A. zones of occupation. Jun 1943. 24p drawing only Mi $2.00 Ph $3.75

Legends in German

Supplement 2 to PB 49278

1. Motorcycles—Manufacture—Germany 2. BIOS FR 620, Item 19, Supp. 2

PB 49278s4

Bayerische Motoren Werke A. G., Munich, Ger.

German motorcycle industry in the British and U.S.A. zones of occupation. Aug 1941. 16p drawing only Mi $1.75 Ph $2.50

Supplement 4 to PB 49272

Legends in German

1. Motorcycles—Manufacture—Germany 2. BIOS FR 620, Item 19, Supp. 4

PB 49278s5

Bayersiche Motoren Werke A. G., Munich, Ger.

German motorcycle industry in the British and U.S.A. zones of occupation. Apr 1947. 2p drawing only Mi $1.25 Ph $1.25

Supplement 5 to PB 49278

Legends in German

1. Motorcycles—Manufacture—Germany 2. BIOS FR 620, Item 19, Supp. 5

PB 49278s6

Bayersiche Motoren Werke A. G., Munich, Ger.

German motorcycle industry in the British and U. S. A. zones of occupation. Apr 1947. 2p drawing only Mi $1.25 Ph $1.25

Supplement 6 to PB 49278

Legends in German

1. Motorcycles—Manufacture—Germany 2. BIOS FR 620, Item 19, Supp. 6

PB 96271

Ludicke, H.

Wartime development of the German motor vehicle industry. Apr 1946. 113p fold graphs, tables Mi $4.75 Ph $15.00

1. Motor vehicles—Industry, Wartime—Germany 2. FIAT IR EF/MV/4

PB 96312

MTZ-motortechnische zeitschrift. (Automotive engineering journal). v. 3, Nos. 1-12. Jan-Dec 1941. v. 4, Nos. 1-11. Jan-Nov 1942. v. 5, Nos. 4-7. May-Jul 1943. 636f (Text in German) Mi $9.00 Enl Pr $82.50

1. Automotive engineering—Periodicals—Germany 2. Micro FIAT O 89, Frames 3254-3890

PB 96643

Thelander, Th.

The electricification of the Swedish State railways, its economic aspects and future possibilities. n.d. 32p photos, maps, diagrs, drawings, graphs, tables Mi $2.25 Ph $5.00

1. Railroads, Electric—Sweden

PB 96644

Thelander, Th.

Some results of electric traction on the Swedish State railways. 1947. 12p map, graph, tables Mi $1.75 Ph $2.50

Report to the Fuel Economy Conference of the World Power Conference, The Hague, 1947

1. Railroads, Electric—Sweden

PB 95864

U. S. Army Service Forces.

Ordnance supply catalog: Organizational spare parts and equipment for truck, 4-ton, 6x6 (Diamond 5 models 967, 968, 968A, 968B, 969, 969A, 969B, 970, 970A and 972). Mar 1945. 38p illus Mi $2.25 Ph $5.00

1. Catalogs, Supply 2. Trucks—Parts 3. ASF Cat. ORD 7 SNL G 509

PB 95879

U. S. Army Service Forces.

Ordnance supply catalog: Organizational spare parts and equipment for truck, 7½-ton, 6x6, prime mover w/winch (Mack) model No-2, No-3, No-6. Jun 1944. 17p illus Mi $1.75 Ph $2.50

1. Trucks—Parts 2. ASF Cat. ORD 7 SNL G-532

PB 95865

U. S. Army Service Forces.

Ordnance supply catalog: Organizational spare parts and equipment, higher echelon spare parts and equipment (Addendum) Service parts catalog for truck, 6-ton 6x6 bridge erection (White model 666). Dec 1944. 505p Mi $9.00 Ph $65.00

1. Trucks—Parts 2. AAF Cat ORD 7-8-9 SNL G-690

PB 96263

Vorwig, Wilhelm

Some figures of production, planned and actual, of motor vehicles in the British Zone of occupation, between the years 1942 and 1945, inclusive. Aug 1946. 16p tables Mi $1.75 Ph $2.50

1. U. S. Field Information Agency. Technical 2. Automobiles—Production statistics—Germany 3. FIAT IR EF/MV/5

Marine Transportation

PB 92117

Afanasyev, Yu.

Icebraker. n.d. 12p diagrs, drawings, graphs, tables Mi $1.75 Ph $2.50

1. Ships, Ice breaking

PB 95398

Davies, Arthur

Benson boilers in Germany for naval and mercantile marine use. Aug 1948. 155p drawings, graphs, tables Mi $6.00 Ph $20.00

Legends in German and English

1. Boilers, Marine—Germany 2. Blohm & Voss, K. G., Hamburg, Ger. 3. Germany. Oberkommando der Kriegsmarine 4. BIOS FR 1784, Item 29

PB 61048s

Davis, H. E. and others.

Causes of cleavage fracture in ship plate: Flat plate tests. Progress report. Apr 1946. 183p photos, diagrs, graphs, tables Mi $6.75 Ph $23.75

This report summarizes the principal results of the tests on wide flat plates completed up to April 15, 1946, under the U.S. Navy Bureau of Ships contract NObs-31222. The program of investigation was begun under OSRD contract OEMsr 1418 and was

originally designated as Project NRC 92. The work of this and related investigations has been coordinated with the advice of the War Metallurgy Committee. The investigational work which is the subject of the report is concerned with the "Causes of Brittle (Cleavage) Fracture in Ship Plate," and specifically pertains to that part of the investigation which has to do with the failure of wide, flat plates at various temperatures. The principal materials used in the tests were three lots of semi-killed, hull quality steels. Two of these steels were of medium carbon and manganese content, tested in "as-rolled" condition and also after having received a normalizing treatment. There were later included in the program of tests one lot of nickel-alloy steel with a nickel content of 3.34 percent, tested in the "as-rolled" condition, one lot of fully killed steel with a 0.16 percent carbon and 0.85 percent manganese content, also tested in "as-rolled" condition, and one lot of fully killed 0.21 percent carbon, 1.05 percent manganese steel that was tested after it had been quenched and drawn. The steels were furnished by the manufacturers in the form of 3/4 in. by 6 ft. by 10 ft. plates. The specimens in the principal program of tests were tested in tension in widths of 72, 48, 24, and 12 in. The specimens all contained a narrow, central, transverse slot having a length of one-fourth of the plate width. Tests were made at each of a number of temperatures in order to determine the range of temperature within which the mode of failure changed from a ductile, shear type to a brittle, cleavage type. In these tests, observations were made to determine the maximum load, failure load, strain distribution across the faces of the plates over several gage lengths, energy absorbed to maximum load, the mode of fracture, and the reduction of thickness near the break. Whenever observations could be made, the load at the development of cracks was also recorded. The tension tests of the severely-notched flat plate indicated that the transition temperatures for the semi-killed steels may vary considerably, although they lay within the range of normal atmospheric temperature. Under the given conditions of test, for one lot of the medium carbon steels the transition range was found to be in the region of freezing temperature while for the other lot, which was almost identical in chemical composition, the transition range was above room temperature. The transition temperature of the low carbon semi-killed steels, both in the normalized and as-rolled conditions, was found to be in the region of freezing temperature. The tests of 12-in. wide plates of fully-killed, quenched and drawn steel indicated that the transition range of this steel also lies in the region of freezing temperature. The transition range for the nickel alloy steel was found to be in the sub-zero region. It was found that, regardless of the mode of fracture, the nominal strength (average stress on net section of plate at maximum load) of the plate decreased as the width of the plate increased. For the semi-killed steels the reduction in thickness at the root of the notch for plates that failed either by shear or cleavage was of the same order of magnitude. The reduction in thickness at the edges of the plate, however, differed markedly for the two modes of failure; for specimens failing by shear, the reduction increased to about four times the reduction at the notch while for the plates with cleavage failures in the reduction in thickness decreased considerably toward the edges of the plate. A number of supplemental studies were made to provide additional information on certain questions raised by the principal tests; of these, two are reported herein. One study was concerned with the maximum strains within the plate near the zone of fracture; a microhardness survey on samples sectioned from selected plates was used as the basis for determining the strains. The second study was made by the use of 3-in. wide, edge-notched tensile bars, in order to develop a simple and rapid means for investigating the notch sensitivity of plate steel over a wide range of conditions.

PB 92112

DeGarmo, E. Paul and Boodberg, A.

Final report on causes of cleavage fracture in ship plate: Hatch corner design tests. Dec 1947. 90p photos, drawings, graphs, tables Mi $3.75 Ph $11.25

1. Ships—Plates—Fracture tests 2. Hatches—Design—Tests 3. NAVSHIPS SSC-16

PB 93532

Grave, Caswell

Service test of metal airborne lifeboat. Jun 1948. 32p photos Mi $2.25 Ph $5.00

1. Rafts, Life—Tests

PB 92689

Gt. Brit. Ministry of Transport.

Instructions as to the tonnage measurement of ships. 1947. 83p drawing, tables Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.55

1. Ships—Measurement—Gt. Brit.

PB 94824

Hammar, Hugo and others.

Statens skeppsprovningsanstalt. (State shipbuilding experimental tank). Publications of the Swedish state shipbuilding experimental tank no. 1 Göteborg, Sweden. 1942. 93p photos, diagrs, drawings (Text in Swedish) Mi $4.25 Ph $12.50

Summary in English

PB 92641

Jacob, F. J. C.

Shipbuilding and marine engineering in Germany during the period 1939-1945. 1948. 23p Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.20

I. Ships—Construction—Germany 2. Engineering, Marine—Germany

PB 94826

Lindblad, Anders.

Experiments with bulbous bows. Publications of the Swedish state shipbuilding experimental tank no. 3, Göteborg, Sweden. 1944. 27p photos, graphs, tables Mi $2.00 Ph $3.75

I. Ships—Design—Sweden

PB 94831

Lindblad, Anders.

Further experiments with bulbous bows. Publications of the Swedish state shipbuilding experimental tank no. 8, Göteborg, Sweden. 1948. 18p photos, graphs, tables Mi $1.75 Ph $2.50

I. Ships—Design—Sweden

PB 94592

McDermott, Reginald F.

Service test of litter rescue raft. Aug 1948. 24p photos, drawing Mi $2.00 Ph $3.75

I. Rafts, Life—Tests

PB 96633

U. S. Bureau of Ships.

Instruction manuals for Hamilton diesel engines models 99DA and RB99DA (Hoover, Owens, Rentschler Co., Hamilton, O). Instruction manuals and parts catalogs for: Nordberg two-cycle mechanical injection marine diesel engines, type TSM (Nordberg Mfg. Co. Milwaukee, Wis). Universal Super-Four marine engine, models LSG, LSGM, LSGR and LSGMR; main propulsion and ship's service generators, exciters and voltage regulators for catapult lighter AVC-1 (Westinghouse Elec. and Mfg. Co. East Pittsburgh, Pa); pneumatic speed regulation and maneuvering control for marine engines (Westinghouse Air Brake Co. Wilmerding, Pa). 20 KW auxiliary power unit (diesel engine, generator compressor and pump). (U. S. Motors, Corp., Oshkosh, Wis.) n.d. 706f Mi $9.00 Enl Pr $91.25

I. Engines, Diesel—Marine 2. Generators, Diesel—Maintenance and repair 3. Regulators, Speed 4. Power plants, Auxiliary 5. 99DA (Diesel engines) 6. RB990DA (Diesel engines) 7. TSM (Diesel engines) 8. LSG (Marine engines) 9. LSGM (Marine engines) 10. LSGR (Marine engines) 11. LSGMR (Marine engines) 12. AVC-1 (Voltage regulators) 13. 20 KW (Auxiliary power unit) 14. Hoover, Owens Rentschler Co., Hamilton, Ohio 15. Norberg Manufacturing Co., Milwaukee, Wis. 16. Westinghouse Electric and Manufacturing Co., East Pittsburg, Pa. 17. Westinghouse Air Brake Co., Wilmerding, Pa 18. U. S. Motors Corporation, Oshkosh, Wis. 19. Micro NAVSHIPS D-6108, Frames 1-706

—62288

PB 96557

U. S. Bureau of Ships.

Instruction manual Sterling Admiral V-2500-6 marine engine. Jul 1941. 84f Mi $3.75 Enl Pr $12.50

I. Engines, Marine 2. Micro NAVSHIPS D-7181, Frames unnumbered

WATER SUPPLY, SANITATION AND PUBLIC HEALTH

PB 2427s18

Belebtschlammbrummen mit nachklärbecken. (Elutriating apparatus with settling tank). n.d. 14p drawing only Mi $1.75 Ph $2.50

Legends in German

I. Sewage disposal plants—Germany 2. Settling tanks—Germany

PB 94672

Deutsche Armaturenfabrik, Leipzig, Ger.

Dal: Klosettspüler. (DAL: Sanitary plumbing equipment). n.d. 21p photos, drawings, tables Mi $2.00 Ph $3.75

I. Plumbing—Equipment—Germany

PB 95988

Gesundheits-ingenieur. (Sanitary engineer). v. 64, Nos. 1-52. 1941. v. 65, Nos. 1-52. 1942. v. 66, Nos. 1-17. 1943. 717f (Text in German) Mi $9.00 Enl Pr $92.50

I. Sanitation—Periodicals—Germany 2. Micro FIAT K 78, Frames 2043-2760

PB 95319

Gt. Brit. Department of Scientific and Industrial Research.

The water pollution research laboratory. 1948. 12p illus Mi $1.75 Ph $2.50

I. Sewage disposal—Gt. Britain 2. Gammexane (Trade name) 3. Water—Pollution

PB 92662

Gt. Brit. Dept. of Scientific and Industrial Research. Building Research Board.

Domestic drainage. Post-war building studies no. 26. Jun 1947. 15p fold drawing Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.20

I. Plumbing—Gt. Brit.

PB 92900

Gt. Brit. Dept. of Scientific and Industrial Research. Water Pollution Research Board.

Water Pollution research, 1946. May 1947. 48p photos, diagrs, graphs, tables Available

from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.35

I. Water—Contamination—Research—Gt. Brit.

PB 81598

Gt. Brit. Ministry of Supply.

Memorandum on salvage and recovery. Apr 1944. 30p tables Mi $1.50 Ph $3.00

I. Waste—Salvage—Gt. Brit.

PB 94013

Gutschow, A.

Disposal of waste material of the communities. Beginnings of a communal disposition of the rubbish at Hamburg. 1944. 13p photos (Text in English and German) Mi $1.75 Ph $2.50

I. Waste products—Disposal—Germany

PB 96775

I. G. Farbenindustrie A. G., Schkopau, Ger.

Reports, etc. on problems of the water section of the intermediate products department. 1940-1945. 47f (Text in German) Mi $2.50 Enl Pr $7.50

See PB 96775s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Water—Purification—Germany 2. Micro BIOS FD 2100/47, Frames 1-46

PB 96674

U. S. National Housing Agency. Office of Housing Expediter.

Individual sewage disposal systems. Recommendations of Joint Committee on Rural Sanitation. 1947. 37p diagrs, drawings, tables Available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. $.10

The committee has studied the various devices used for disposal of sewage in rural areas and presents its recommendations under the heading of water carriage and nonwater carriage methods. Under the first heading are included: The septic tank, subsurface disposal field, seepage pit dry well and cesspool. Under the second heading are: The earth privy, masonry vault privy, chemical toilet, pail or pan type privy, and cremating latrine or incinerator privy. The guide gives minimum requirements below which no individual sewage system should be allowed to fall. This document is reprint No. 2461 U. S. Public Health Service. Federal Security Agency (revised 1947).

PB 96286

Wasserkraft und wasserwirtschaft. (Water power and regulation of water supply). v. 35, Nos. 1-12. 1940. v. 37, Nos. 1-12. 1942. v. 38, Nos. 1-12. 1943. v. 39, Nos. 1-4. 1944. 578f (Text in German) Mi $9.00 Enl Pr $75.00

I. Hydraulics—Periodicals—Germany 2. Water power—Periodicals—Germany 3. Water supply—Periodicals—Germany 4. Micro FIAT E 89, Frames 1347-1919

—62288

MISCELLANEOUS

PB 96539

Andrews, C. S. and Collins, L.

German peat industry. n.d. 41p Mi $2.50 Ph $6.25

I. Peat—Germany 2. BIOS FR 1817, Item 30

PB 95962

Archiv für technisches messen. (Archives for technical measuring). 1932-1944. 998f (Text in German) Mi $9.00 Enl Pr $130.00

I. Weights and measures—Periodicals—Germany 2. Micro FIAT O 56, Frames 2831-3820

PB 95315

Austin, O. L.

Japanese wildlife sanctuaries and public hunting grounds, 1948. Sep 1948. 37p tables Mi $2.25 Ph $5.00

I. Wildlife—Conservation—Japan 2. SCAP NRS PS 28

PB 94561

Bowles, A. E. and others.

German fire services. Oct 1945. 76p table Mi $3.50 Ph $10.00

I. Fire protection—Germany 2. BIOS FR 1765, Item 33

PB 93862

British Intelligence Objectives Sub-Committee.

Technical index of reports on German industry. Jul 1946. 128p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.60

I. Industries—Indexes—Gt. Brit.

PB 93862s

British Intelligence Objectives Sub-Committee.

Technical index of reports on German industry. Part 2. Oct 1946. 36p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.55

I. Industries—Indexes—Gt. Brit.

PB 93862s2

British Intelligence Objectives Sub-Committee.

Technical index of reports on German industry. Part 3. Dec 1946. 31p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.55

I. Industries—Indexes—Gt. Brit.

PB 93862s3

British Intelligence Objectives Sub-Committee.

Technical index of reports on German industry. Part 4. Mar 1947. 43p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $.70

I. Industries—Indexes—Gt. Brit.

PB 93862s4

British Intelligence Objectives Sub-Committee.
Technical index of reports on German industry, Part 5. Sep 1947. 76p Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.15
I. Industries—Indexes—Gt. Brit.

PB 94623

Brown, A. J. N. and others.
Centrifugal casting in Germany with particular reference to the production of non-ferrous tubes. Aug 1946. 62p drawings, tables Mi $3.00 Ph $8.75
I. Casting, Centrifugal—Germany 2. Tubes, Non-ferrous—Germany 3. Osnabrücker Kupfer- & Drahtwerk A.G., Osnabrück, Ger. 4. Ruhrstahl A.G., Ruhrstahlwerk Witten, Witten, Ger. 5. Halberger-hütte G.m.b.H., Brebach/Saar, Ger. 6. Schwietzke, J. G., Düsseldorf, Ger. 7. BIOS FR 1797, Item 21

PB 92690

Clark, N. O.
Study of mechanically produced foam for combating petrol fires. Apr 1947. 117p photo, diagrs, drawings, graphs, tables Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.90
I. Foam, Chemical—Production—Gt. Brit.

PB 94654

Cretcher, R. E.
Salt spray test on "Andal" life vest inflator. Aug 1948. 2p Mi $1.25 Ph $1.25
I. Vests, Life—Tests

PB 92685

Crowther, J. G. and Whiddington, R.
Science at war. 1947. 129p photos, diagrs, drawings Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.90
I. War and science—Gt. Brit. 2. Gt. Brit. Dept. of Scientific and Industrial Research

PB 91255

Daimler-Benz A. G.
Worksheets: Detailed lists of wages and coloured charts for assembly of different parts of the ME 264 and BF 109F. May 1945. 53f tables (Text in German) Mi $2.75 Enl Pr $8.75
No abstract available
I. ME 264 2. BF 109F 3. Micro BIOS FD 2622/-45, Frames 1-52

PB 91243

Dielektra A. G., Porz, Ger.
Insulating materials. 1936-1945. 124f photos, tables (Text in German and English) Mi $5.00 Enl Pr $17.50
Referred to on p viii of BIOS FR 893, Item 1, 7, 22, 31 (PB 75859)
See also Micro BIOS FD 2686/46 (PB 91239); Micro BIOS FD 2589/46 (PB 91242); and Micro BIOS FD 2592/46 (PB 91245) 2p. Mi $1.25 Ph $1.25
See PB 91243s for abstracts
I. Insulating materials—Germany 2. Micro BIOS FD 2590/46, Frames incorrectly numbered

PB 91426

Drägerwerk, Lübeck, Ger.
Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part I. 1945. 831f (Text in German) Mi $9.00 Enl Pr $110.00
See PB 91427-91435 for Pts II-X
See PB 91426s for abstracts. 2p. Mi $1.25 Ph $1.25
I. Respiration—Equipment—Germany 2. Diving equipment—Germany 3. Micro BIOS FD 700/46, Pt. I, Frames unnumbered

PB 91427

Drägerwerk, Lübeck, Ger.
Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part II. 1945. 656f Mi $9.00 Enl Pr $86.25
See PB 91426, PB 91428-91435 for Pts I, III-X
See PB 91427s for abstracts. 2p. Mi $1.25 Ph $1.25
I. Micro BIOS FD 700/46, Pt. II, Frames unnumbered

PB 91428

Drägerwerk, Lübeck, Ger.
Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part III. 1945. 578f Mi $9.00 Enl Pr $76.25
See PB 91426, 91427, 91429-91435 for Pts. I-II, IV-X.
See PB 91428s for abstracts. 2p. Mi $1.25 Ph $1.25
I. Micro BIOS FD 700/46, Pt. III, Frames unnumbered

PB 91429

Drägerwerk, Lübeck, Ger.
Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part IV. 1945. 901f Mi $9.00 Enl Pr $117.50
See PB 91426-91428, 91430-91435 for Pts I-III, V-X.
See PB 91429s for abstracts. 2p. Mi $1.25 Ph $1.25
I. Micro BIOS FD 700/46, Pt. IV, frames unnumbered

PB 91430

Drägerwerk, Lübeck, Ger.
Breathing equipment and the control of compressed gases, on land, under water, and in the

air. Constructional drawings. Part V. 1945. 758f Mi $9.00 Enl Pr $100.00

See PB 91426-91429, 91431-91435 for Pts I-IV, VI-X.

See PB 91430s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. V., Frames incorrectly numbered

PB 91431

Drägerwerk, Lübeck, Ger.

Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part VI. 1945. 876f Mi $9.00 Enl Pr $115.00

See PB 91426-91430, 91432-91435 for Pts I-V, VII-X

See PB 91431s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. VI, Frames incorrectly numbered

PB 91432

Drägerwerk, Lübeck, Ger.

Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part VII. 1945. 875f Mi $9.00 Enl Pr $115.00

See PB 91426-91431, 91433-91435 for Pts I-VI, VIII-X

See PB 91432s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. VII, Frames incorrectly numbered

PB 91433

Drägerwerk, Lübeck, Ger.

Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part VIII. 1945. 857f Mi $9.00 Enl Pr $112.50

See PB 91426-91432, 91434, 91435 for Pts I-VII. IX, X

See PB 91433s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. VIII, Frames unnumbered

PB 91434

Drägerwerk, Lübeck, Ger.

Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part IX. 1945. 728f Mi $9.00 Enl Pr $95.00

See PB 91426-91433, 91435 for Pts I-VIII, X

See PB 91434s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. IX, Frames unnumbered

—62288

PB 91435

Drägerwerk, Lübeck, Ger.

Breathing equipment and the control of compressed gases, on land, under water, and in the air. Constructional drawings. Part X. 1945. 421f Mi $9.00 Enl Pr $56.25

See PB 91426-91435 for Pts I-IX

See PB 91435s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Micro BIOS FD 700/46, Pt. X, Frames incorrectly numbered

PB 95229

Drägerwerk, Lübeck, Ger.

Diving equipment. 1935-1945. 158f (Text in German) Mi $9.00 Enl Pr $58.75

See PB 95229s for abstracts. 2p. Mi $1.25 Ph $1.25

I. Diving equipment—Germany 2. Respiration—Equipment—Germany 3. Micro BIOS FD 321/46, Frames 1-457

PB 95258

Duncan, W. J. and others.

Theory of the flat elastic parachute. Mar 1942. 10p graphs Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. $1.15

A flat parachute has a simplified type of canopy which, when unloaded, can be developed into a plane sheet. The behavior under load of such canopies depends largely on the elasticity of the fabric and the present report gives a mathematical investigation of their forms and of the stresses in them. It is assumed that the canopy near the crown is a surface of revolution up to a critical radius where the circumferential tension vanishes; beyond this radius very small regular wrinkles are assumed, and the shape conforms to that of the Taylor parachute. In practice canopies usually fail at places where the stress is concentrated, near rigging line attachments, etc., but stress concentrations can be reduced by good design. However, the tensile stress at the crown determines an upper bound to the load-carrying capacity of the canopy. When the greatest permissible stretch is very small the permissible load is proportional to the fourth root of this stretch. ARC RM 2118

PB 90818

Elbtalwerk Eag, Heidenau, Ger.

Sirens. n.d. 7f (Text in German) Mi $1.25 Enl Pr $2.50

See PB 90818s for abstracts Ip. Mi $1.25 Ph $1.25

I. Sirens—Germany 2. Micro BIOS FD 1702/47, Frames 1-6

PB 95623

France. Ministère de la Production.

Miscellaneous reports dealing mainly with industrial chemistry, metals and rubber. 1936-1944. 498f (Text in German) Mi $9.00 Enl Pr $61.25

Frames 2109-2114 are illegible

No abstracts available

1. Magnesium alloys—Properties 2. Magnewin 3501 (Trade name) 3. Magnewin 3510 (Trade name) 4. Magnewin 3515 (Trade name) 5. Platit (Contact material for aircraft magnetos) 6. Wargel (Airborne amphibious vehicle) 7. Furnaces—Design 8. Forgings—Heat treatment 9. Phosphate—Preparation 10. Magnesium-aluminium-zinc alloys 11. Magnesium—iron alloys 12. Magnesium-manganese alloys 13. Ignition 14. Voltage—Measurements 15. Magnetos, Aircraft 16. Automobiles—Design 17. X-ray photographs 18. Radio waves—Propagation—Obstructions 19. Wintershall A. G., Heringen, Ger. 20. Dornier-Werke G.m.b.H., Friedrickshafen, Ger. 21. Bosch, Robert G.m.b.H., Stuttgart, Ger. 22. Micro FIAT A 360, Frames 1667A-2143E

PB 95627

France. Ministère de la Production.

Miscellaneous reports dealing mainly with industrial chemistry, metals and rubber. 1938-1942. 498f (Text in German) Mi $9.00 Enl Pr $65.00

No abstracts available

1. Anti-freezes—Germany 2. Lubricants—Tests—Germany 3. Glass, Safety—Germany 4. Engines, Combustion—Germany 5. Engines, Two cycle—Germany 6. Brakes—Linings—Tests—Germany 7. Pistons—Acceleration—Germany 8. Noise—Effects—Germany 9. Magnesium alloys—Properties—Germany 10. Magnewin (Trade name) 11. Magnewin L5 (Trade name) 12. Isolux (Tubes) 13. Wintershall A. G., Heringen, Ger. 14. Micro FIAT A 359, Frames 1169-1667

PB 95613

France. Ministère de la Production.

Miscellaneous reports dealing mainly with metals, minerals, glass, building materials, glass, building material and petroleum. 1935-1946. 273f (Text in German and English) Mi $9.00 Enl Pr $36.25

See PB 95613s for abstracts. 17p. Mi $1.75 Ph $2.50

1. Metals—Production—Germany 2. Minerals—Tests—Germany 3. Building materials—Manufacture—Germany 4. Petroleum—Production—Germany 5. Micro FIAT A 341, Frames 1459-1732

PB 95613

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Iron powder metallurgy. 1945. Frames 1459-1470 (Text in German) Enl Pr $3.75

Duplicate of PB 93041

1. Micro FIAT A 341, Frames 1459-1470 2. Micro BIOS FD 2458/46, Frames 1459-1470

PB 95613

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Iron powder metallurgy. 1945. Frames 1471-1479 (Text in German) Enl Pr $2.50

1. Micro FIAT A 341, Frames 1471-1479 2. Micro BIOS FD 2459/46, Frames 1471-1479

PB 95613

Rheinmetall-Borsig A. G., Berlin.

Effect of corrosion by sea water on copper-alloy and copper-free steels. 1935. Frames 1480-1484 (Text in German) Enl Pr $2.50

1. Copper—Corrosion—Germany 2. Micro FIAT A 341, Frames 1480-1484 3. Micro BIOS FD 2466/46, Frames 1480-1484

PB 95613

Chemisches Untersuchungsamt, Hanover, Ger.

Analysis of chromium in alloys. 1946. Frames 1485-1487 (Text in English) Enl Pr $2.50

1. Chromium—Analysis—Germany 2. Micro FIAT A 341, Frames 1485-1487 3. Micro BIOS FD 2471/46, Frames 1485-1487

PB 95613

Vereinigte Aluminium Werke A.G., Grevenbroich, Ger.

Determination of iron, sulphur and chromium in aluminium. 1946. Frames 1488-1490 (Text in English) Enl Pr $2.50

1. Aluminum—Analysis—Germany 2. Iron—Determination—Germany 3. Sulphur—Determination—Germany 4. Chromium—Determination—Germany 5. Micro FIAT A 341, Frames 1488-1490 6. Micro BIOS FD 2472/46, Frames 1488-1490

PB 95613

Osnabrücker Kupfer & Drahtwerk A.G., Osnabrück, Ger.

Determination of chromium in aluminum and aluminum alloys. 1946. Frames 1491-1492 (Text in English) Enl Pr $2.50

1. Aluminum—Analysis—Germany 2. Chromium—Determination—Germany 3. Micro FIAT A 341, Frames 1491-1492 4. Micro BIOS FD 2473/46, Frames 1491-1492

PB 95613

Halbergerhütte G.m.b.H., Hildesheim, Ger.

Determination of chrome in aluminum alloys. n.d. Frames 1493-1494 (Text in English) Enl Pr $2.50

1. Aluminum—Analysis—Germany 2. Chromium—Determination—Germany 3. Micro FIAT A 341, Frames 1493-1494 4. Micro BIOS FD 2475/46, Frames 1493-1494

PB 95613

Dynamit A. G., Troisdorf, Ger.

Manufacture of fuzes and detonators. 1946. Frames 1495-1614 (Text in English) Enl Pr $16.25

1. Fuzes—Manufacture—Germany 2. Detonators—Manufacture—Germany 3. Micro FIAT A 341, Frames 1495-1614 4. Micro BIOS FD 2505/46, Frames 1495-1614

PB 95613

Kreuser, A., G.m.b.H., Dortmund, Ger.

Drawings of ring rolling mills. n.d. Frames 1615-1620 drawings (Text in German) Enl Pr $2.50

See also BIOS FR 693, Item 21 (PB 49215)

1. Rolling mills—Design—Germany 2. Micro FIAT A 341, Frames 1615-1620 3. Micro BIOS FD 2508/46, Frames 1615-1620

PB 95613

Vereinigte Deutsche Metallwerke, Frankfurt am Main, Ger.

Drawings of forging machinery. 1942. Frames 1621-1624 drawings (Text in German) Enl Pr $2.50

See also BIOS FR 693, Item 21 (PB 49215)

1. Forging plants—Germany 2. Micro FIAT A 341, Frames 1621-1624 3. Micro BIOS FD 2510/46, Frames 1621-1624

PB 95613

Mannesmann Rohrenwerke, Hückingen, Ger.

Creep resistance of coarse and fine grain steel. 1939. Frames 1625-1659 graphs (Text in German) Enl Pr $6.25

1. Steel—Creep tests 2. Micro FIAT A 341, Frames 1625-1659 3. Micro BIOS FD 2519/46, Frames 1625-1659

PB 95613

Mannesmann Rohrenwerke, Hückingen, Ger.

Development of a process for the production of high quality Thomas steel. 1944. Frames 1660-1707 (Text in German) Enl Pr $7.50

1. Steel, Bessemer—Germany 2. Micro FIAT A 341, Frames 1660-1707 3. Micro BIOS FD 2520/46, Frames 1660-1707

PB 95613

Vereinigte Deutsche Metallwerke, Heddernheim, Ger.

Sintered iron-base bearings. Frames 1708-1732 (Text in German) Enl Pr $5.00

1. Bearings, Sintered—Germany 2. Micro FIAT A 341, Frames 1708-1732 3. Micro BIOS FD 2525/46, Frames 1708-1732

PB 95618

France. Ministère de la Production.

Miscellaneous reports dealing with metals and minerals, glass, building material and petroleum. 1938-1945. 478f (Text in German, French or English) Mi $9.00 Enl Pr $61.25

See PB 95618s for abstracts. 28p. Mi $2.00 Ph $3.75

1. Metals—Production—Germany 2. Minerals—Tests—Germany 3. Building materials—Manufacture—Germany 4. Petroleum—Production—Germany 5. Micro FIAT A 340, Frames 980-1458

PB 95618

Krupp, Friedrich, A. G., Essen, Ger.

Iron powder production and research. 1938-1944. Frames 980-1080 (Text in German) Enl Pr $13.75

1. Iron powders—Production—Germany 2. Micro FIAT A 340, Frames 980-1080 3. Micro BIOS FD 1966/46, Frames 980-1080

PB 95618

Krupp, Friedrich, A. G., Essen, Ger.

Processing of cemented carbides (Hartmetall): Welding, soldering and coating. 1940-1943. Frames 1081-1095 (Text in German) Enl Pr $3.75

1. Carbides, Cemented—Welding—Germany 2. Carbides, Cemented—Soldering—Germany 3. Carbides, Cemented—Coating—Germany 4. Micro BIOS FD 1968/46, Frames 1081-1095 5. Micro FIAT A 340, Frames 1081-1095

PB 95618

Krupp, Friedrich A. G., Essen, Ger.

Sintered carbides: Production and research. 1942-1944. Frames 1096-1132 (Text in German) Enl Pr $6.25

Duplicate of PB 91016

1. Micro FIAT A 340, Frames 1096-1152 2. Micro BIOS FD 1969/46, Frames 1096-1152

PB 95618

Krupp, Friedrich A. G., Essen, Ger.

Sintering of cemented carbides. 1940-1943. Frames 1133-1245 (Text in German) Enl Pr $16.25

Duplicate of PB 91017

1. Micro FIAT A 340, Frames 1133-1245 2. Micro BIOS FD 1970/46, Frames 1133-1245

PB 95618

Krupp, Friedrich A. G., Essen, Ger.

Reports dealing with the technical aspects of metal powder production, and with descriptions of apparatus manufactured from sintered metals, or used in connection with metal powder production. 1941-1944. Frames 1246-1287 (Text in German) Enl Pr $7.50

1. Metal powders—Production—Germany 2. Metals, Sintered—Uses—Germany 3. Micro FIAT A 340, Frames 1246-1287 4. Micro BIOS FD 1977/46, Frames 1246-1287

PB 95618

Vereinigte Leichtmetall-Werke G.m.b.H., Hanover, Ger.

Grain liquation of aluminum-copper alloys and the "Emetal" process. 1945. Frames 1288-1338 (Text in German) Enl Pr $7.50

1. Aluminum-copper alloys—Germany 2. Emetal process (Electro-disposition of aluminum-copper alloys) 3. Micro FIAT A 340, Frames 1288-1338 4. Micro BIOS FD 2070/46, Frames 1288-1338

PB 95618

Westfälisch-Anhaltische Sprengstoff A.G., Reinsdorf, Ger.

Minutes and notes relating to a method of metallic coating of wood, with particular regard to the metal-coating of wooden airscrews. 1938-1943. Frames 1339-1357 (Text in German) Enl Pr $3.75

1. Propellers, Wood—Metallizing—Germany 2. Micro FIAT A 340, Frames 1339-1357 3. Micro BIOS FD 2344/48, Frames 1339-1357

PB 95618

Berlin. Technische Hochschule.

Testing of metallized plywood rods. 1943. Frames 1358-1377 (Text in German) Enl Pr $3.75

1. Rods, Ply-wood—Metallized—Germany 2. Micro FIAT A 340, Frames 1358-1377 3. Micro BIOS FD 2364/46, Frames 1358-1377

PB 95618

Sachsenberg, Gebrüder A.G., Dessau-Rosslau, Ger.

The aluminium spraying process. 1939-1940. Frames 1378-1386 (Text in German) Enl Pr $2.50

1. Sprayers, Metal—Germany 2. Micro BIOS FD 2365/46, Frames 1378-1386 3. Micro FIAT A 340, Frames 1378-1386

PB 95618

Duisburger Kupferhütte, Duisburg, Ger.

New methods for the production of 99.999% pure zinc and other pure metals. 1945. Frames 1387-1398 (Text in English) Enl Pr $3.75

1. Zinc—Production—Germany 2. Micro BIOS FD, 2427/46, Frames 1387-1398 3. Micro FIAT A 340, Frames 1387-1398

PB 95618

Rheinmetall-Borsig A. G., Unterlüss, Ger.

Special spring construction for high tension. 1945. Frames 1399-1441 (Text in German) Enl Pr $7.50

1. Springs—Manufacture—Germany 2. Micro BIOS FD 2430/46, Frames 1399-1441 3. Micro FIAT A 340, Frames 1399-1441

PB 95618

Deutsche Versuchsanstalt für Luftfahrt E.B., Braunschweig, Ger.

Centrifugal-tensile tests on ceramic blade test pieces. n.d. Frames 1442-1458 (Text in English) Enl Pr $3.75

1. Blades, Ceramic—Germany 2. Micro FIAT A 340, Frames 1442-1458 3. Micro BIOS FD 1452/46, Frames 1442-1458

PB 95544

France. Ministère de la Production.

Miscellaneous reports dealing mainly with metals, minerals, glass, building material and petroleum. 1941-1946. 159f (Text in German and English) Mi $6.00 Enl Pr $21.25

See PB 95544s for abstracts. 21p. Mi $2.00 Ph $3.75

1. Metals—Production 2. Minerals—Tests 3. Building materials—Manufacture 4. Petroleum—Production 5. Micro FIAT A 343, Frames 2201-2358

PB 95544

Dortmund-Hoerder Hüttenverein A.G., Dortmund, Ger.

Rolling mill capacities. n.d. Frames 2201-2202 (Text in English) Enl Pr $2.50

See also BIOS FR 1182, Item 21 (PB 77722)

1. Rolling mills—Capacity 2. Micro FIAT A 343, Frames 2201-2202 3. Micro BIOS FD 606/47, Frames 2201-2202

PB 95544

Dortmund-Hoerder Hüttenverein A. G., Dortmund, Ger.

Steel manufacturing programme. n.d. Frames 2203-2204 (Text in English) Enl Pr $2.50

See also BIOS FR 1182, Item 21 (PB 77722)

1. Steel—Manufacture—Germany 2. Micro FIAT A 343, Frames 2203-2204 3. Micro BIOS FD 607/47, Frames 2203-2204

PB 95544

I. G. Farbenindustrie A. G., Höchst, Ger.

Agents for metal cutting. Mepasin, Kogasin etc. 1945. Frames 2205-2210 (Text in English) Enl Pr $2.50

See also BIOS FR 478, Item 22 (PB 31278)

1. Kogasin—Germany 2. Mepasin (Emulsifying agent) 3. Mersol H (Trade name) 4. Emulsifying agents—Germany 5. Micro FIAT A 343, Frames 2205-2210 6. Micro BIOS FD 684/47, Frames 2205-2210

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Analysis of steel by means of spot reactions on the material. 1941. Frames 2211-2228 (Text in German) Enl Pr $3.75

1. Steel—Analysis—Germany 2. Micro FIAT A 343, Frames 2211-2228 3. Micro BIOS FD 788/47, Frames 2211-2228

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Transformation kinetics of steel. 1945. Frames 2229-2231 (Text in German) Enl Pr $2.50

See also BIOS FR 1353, Item 21 (PB 81543)

1. Steel—Transformation—Germany 2. Micro FIAT A 343, Frames 2229-2231 3. Micro BIOS FD 1274/47, Frames 2229-2231

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Dilatometric research on austenite decomposition. 1945. Frames 2232-2253 (Text in German) Enl Pr $5.00

See also BIOS FR 1353, Item 21 (PB 81513)

1. Steel—Austenite content 2. Micro FIAT A 343, Frames 2232-2253 3. Micro BIOS FD 1275/47, Frames 2232-2253

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Relation of fatigue and phase diagram in columbiam steels. 1945. Frames 2254-2262 (Text in German) Enl Pr $2.50

See also BIOS FR 1353, Item 21 (PB 81543)

1. Steel—Creep—Germany 2. Niobium—Germany 3. Steel—Columbium content—Germany 4. Micro FIAT A 343, Frames 2254-2262 5. Micro BIOS FD 1276/47, Frames 2254-2262

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Experiments on tempering resistance of hardened steel. n.d. Frames 2263-2266 (Text in German) Enl Pr $2.50

See also BIOS FR 1353, Item 21 (PB 81543)

1. Steel—Tempering—Germany 2. Micro FIAT A 343, Frames 2263-2266 3. Micro BIOS FD 1277/47, Frames 2263-2266

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Influence of cooling speed on conversions of niobium steel. 1945. Frames 2267-2280 (Text in German) Enl Pr $3.75

See also BIOS FR 1353, Item 21 (PB 81543)

1. Steel—Converter process—Germany 2. Niobium—Germany 3. Micro FIAT A 343, Frames 2267-2280 4. Micro BIOS FD 1278/47, Frames 2267-2280

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Cooling capacity of quenching agents, especially aqueous salt solutions. 1945. Frames 2281-2291 (Text in German) Enl Pr $2.50

Duplicate of PB 93019

1. Micro FIAT A 343, Frames 2281-2291 2. Micro BIOS FD 1280/47, Frames 2281-2291

PB 95544

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Measurement of tension by X-ray. 1945. Frames 2292-2300 (Text in German) Enl Pr $2.50

See also BIOS FR 1353, Item 21 (PB 81543)

1. Tension—Measurement 2. X-ray inspection 3. Micro FIAT A 343, Frames 2292-2300 4. Micro BIOS FD 1281/47, Frames 2292-2300

—82288

PB 95544

Wickeder Eisen und Stahlwerk G.m.b.H., Wichede, Ger.

Feran: Aluminum clad steel strip. n.d. Frames 2301-2307 (Text in English) Enl Pr $2.50

1. Feran (Trade name) 2. Steel, Aluminum coated 3. Micro FIAT A 343, Frames 2301-2307 4. Micro BIOS FD 1905/47, Frames 2301-2307

PB 95544

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Patent application relating to intercrystalline corrosion resisting steel. 1944. Frames 2308-2311 (Text in German) Enl Pr $2.50

1. Steel—Corrosion tests—Patents—Germany 2. Steel—Crystallization—Patents—Germany 3. Micro FIAT A 343, Frames 2308-2311 4. Micro BIOS FD 2958, Frames 2308-2311

PB 95544

Vereinigte Aluminium Werke A. G., Berlin.

Production of aluminum with primary properties from scrap. 1946. Frames 2312-2358 (Text in German and English) Enl Pr $7.50

1. Aluminum—Electrolysis 2. Aluminum—Production 3. Micro FIAT A 343, Frames 2312-2358 4. Micro BIOS FD 3297/47, Frames 2312-2358

PB 95607

France. Ministère de la Production.

Miscellaneous reports deals with fuels, petroleum and glass. 1935-1937, 1940, 1942-1943, 1945. 326f (Text in German) Mi $9.00 Enl Pr $43.75

See PB 95607s for abstract. 14p. Mi $1.75 Ph $2.50

1. Micro FIAT A 352, Frames 5010A-5336

PB 95607

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Low temperature carbonization of briquettes made from mixtures by hydrogenation products, or from bitumen and hard coal under the simultaneous production of solid coke. 1940. Frames 5010A-5056 (Text in German) Enl Pr $11.25

1. Briquettes, Fuel—Germany 2. Micro FIAT A 352, Frames 5010A-5056 3. Micro BIOS FD 3310/46, Frames 5010A-5056

PB 95607

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.

The firing of salt-containing coal. 1942. Frames 5057-5079. (Text in German) Enl Pr $5.00

1. Combustion 2. Coal—Hydrogenation—Germany 3. Micro FIAT A 352, Frames 5057-5079 4. Micro BIOS FD 3368/46, Frames 5057-5079

PB 95607

I. G. Fargenindustrie A. G., Merseburg Ammonia Works, Ger.

The influence of slag and hydrogenation residue on the melting behavior of salty coal ashes. 1943. Frames 5080-5096 (Text in German) Enl Pr $3.75

1. Coal—Hydrogenation—Germany 2. Combustion 3. Micro FIAT A 352, Frames 5080-5096 4. Micro BIOS FD 3369/46, Frames 5080-5096

PB 95607

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.

The reduction to ash of lignite rich in salts with the addition of kaolin and calcium carbonate. 1943. Frames 5097-5106 (Text in German) Enl Pr $2.50

1. Combustion 2. Coal—Hydrogenation—Germany 3. Micro FIAT A 352, Frames 5097-5106 4. Micro BIOS FD 3370/46, Frames 5097-5106

PB 95607

I. G. Farbenindustrie A. G., Oppau, Ger.

Content of inorganic sulphur in the gases of the water gas process in dependence of the time factor. 1940. Frames 5107-5117 (Text in German) Enl Pr $2.50

1. Sulfur—Removal from coke oven gas 2. Gases—Analysis—Germany 3. Micro BIOS FD 3375/46, Frames 5107-5117 4. Micro FIAT A 352, Frames 5107-5117

PB 95607

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.

Erection and efficiency of the Alkacid installation and claus furnace, by Dr. Braus. Present position as regards desulfurizing of cracking petrol by the Alkacid process, by Dr. Wenzel. Purification of the low carburization gases by the Alkacid process, by Dr. Wenzel. 1935-1947. Frames 5118-5249 (Text in German) Enl Pr $18.75

1. Gases—Purification—Germany 2. Alkacid process 3. Claus ovens—Germany 4. Micro FIAT A 352, Frames 5118-5249 5. Micro BIOS FD 3376/46, Frames 5118-5249

PB 95607

I. G. Farbenindustrie A. G., Merseburg Ammonia Works, Ger.

Removal of hydrogen sulphide from water gas by washing with ammonium bisulphite liquer, by Dr. Wenzel. 1936. Frames 5250-5262 (Text in German) Enl Pr $3.75

1. Hydrogen sulfide—Removal from gases 2. Micro FIAT A 352, Frames 5250-5262 3. Micro BIOS FD 3377/46, Frames 5250-5262

PB 95607

Siemens-Schuckertwerke A. G., Berlin.

Glass fibres as insulating material in the electrical industry. 1945. Frames 5263-5336 (Text in German) Enl Pr $11.25

1. Fiberglas—Uses—Germany 2. Insulating materials, Fiberglas—Germany 3. Micro FIAT A 352, Frames 5263-5336 4. Micro BIOS FD 3501/47, Frames 5263-5336

PB 92116

Germany. Kriegsmarine

Correspondence file covering ardexin poisoning, substitution of chlorobromomethane for ardexin and minimaxin, safety precautions. Mar 1947. 154p tables Mi $5.75 Ph $20.00

1. Ardexin—Germany 2. Fire extinguishing agents—Germany

PB 92115

Germany. Kriegsmarinewerft, Wilhelmshafen, Ger.

Description and operation of airfoam apparatus to combat gasoline fires on ships' decks. Nov 1947. 5p drawing Mi $1.25 Ph $1.25

1. Fire control equipment—Germany 2. Fire extinguishers, Foam—Germany

PB 91263

Germany. Reichsministerium für Ernährung und Landwirtschaft.

The present location, available personnel and documentary material of some departments of the Reich Ministry of Food and Agriculture, etc. May 1945. 5f (Text in English) Mi $1.25 Enl Pr $2.50

No separate abstract available

1. Micro BIOS FD 2685/45, Frames 1-4

PB 95074

Gilbert, Robert L. and Haibach, Donald J.

Reforestation in Japan. Sep 1948. 50p photos, map, graphs, tables Mi $2.50 Ph $6.25

Few countries in the world are as dependent upon a complete and productive forest cover as is Japan; complete in order to prevent erosion and floods with all their miserable aftermath, and productive in order to meet the thousand needs of a people—needs that in other countries would be met partly with other materials. With two-thirds of their country classed as forest land, the Japanese have been aware for centuries of the importance of the forest, as witnessed by the age and size of some plantations and the forest history of the Tokugawa Period (1603-1867). When natural reforestation was unsatisfactory it was aided. When entire watersheds were bare, they were artificially reforested, usually with a coniferous species. Artificial reforestation constantly increased through the centuries; not until it reached a high of 336,700 cho in 1943 did it begin to decline. Natural reforestation reached a peak of 361,500 cho in 1941. Prior to that time it had always greatly exceeded artificial reforestation. Beginning in 1942 and continuing to the present, cutting took place annually on more than 7,000,000 cho, the greater part of which has been clearcut. The proportion of clearcutting as compared to selection

cutting increased from 67 percent in 1943 to 88 percent in 1946 and 1947. Total cutting reached a peak of 909,000 cho in 1946. The Bureau of Forestry estimated that as of April 1947 nearly 2,500,000 cho were in need of reforestation, of which 786,000 cho were in the national forests and 1,705,000 cho in private and other ownerships. More than 60 percent of the total is in forests that primarily produced timber, nearly all of which will have to be artificially planted or seeded (as must the 323,000 cho of protection forests that require damage repair and prevention activities) or receive some aid to natural regeneration. One-fourth of the area in need of reforestation normally produced fuelwood, and only one-half of this is considered capable of reforesting naturally. Preliminary data for 1947 indicate that the area in need of reforestation has increased to nearly 2,900,000 cho. More than 2,000,000 cho are in private and other ownerships, while 877,000 cho belong to the national forests. All phases of all reforestation plans in recent years have failed to achieve their original goals by wide margins. The latest national forest plan provides for artificially reforesting 276,000 cho and aiding natural reforestation on 597,000 cho during 1948-52. This is nearly adequate to reforest both the present national forest cutover lands and the areas likely to require only "aid to natural reforestation" after being cut during the program. It does not provide for the areas likely to be clearcut during the course of the program. Clearcutting in national forests have averaged 35,000 cho annually (including some coppice fuelwood stands that reforest naturally) in recent years. A separate "protection forest" five-year reforestation plan provides for only 21 percent of national forest requirements. The 1948-52 private forest plan provides for artificially reforesting 1,433,000 cho and aiding natural reforestation on 545,000 cho. This is adequate to erase the present backlog of needs but does not provide for the areas likely to be cut during the program. The "protection forest" five-year reforestation plan provides for only 29 percent of the private forest requirements. SCAP NRS 113

PB 92687

Gt. Brit. Dept. of Scientific and Industrial Research.

Notes on grants to research workers and students. Revised edition. Feb 1948. 11p table Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.10

1. Student loan funds—Gt. Brit.

PB 92709

Gt. Brit. Ministry of Fuel and Power.

Gravity warm air system: Background heating in small dwelling houses. Nov 1947. 14p drawings Available from British Information Services, 30 Rockefeller Plaza, New York 20, New York $.55

1. Heating, Gravity warm air—Gt. Brit.

PB 96316

Gutehoffnungshütte Oberhausen A.G. Mitteilungen. (Gutehoffnungshütte Oberhausen A.G. Reports). v. 10. Jun-Oct 1943.

Communications in the field of river construction and research. v. 9. 1939. v. 10—v. 13. 1940.

Deutschen materialprüfungsanstalten. Mitteilungen. (German materials testing institutes. Reports). Nos. 24-31. 1939-1943.

Deutschen materialprüfungsanstalten wissenschaftliche abhandlungen. (German materials testing institutes. Scientific studies). v. 1—v. 6. 1938-1940. 663f (Text in German) Mi $9.00 Enl Pr $87.50

See PB 96316s for abstracts. 17p. Mi $1.75 Ph $2.50

1. Metallurgy—Periodicals—Germany 2. Mechanical engineering—Periodicals—Germany 3. Hydraulics—Germany 4. Materials—Testing standards—Germany 5. Micro FIAT O 85, Frames 814-1478

PB 95327

Hall, John F., Jr.

Effect of compression on the insulation of a sleeping bag. Oct 1948. 3p tables Mi $1.25 Ph $1.25

1. Sleeping bags 2. AAF TSEAA MR 696-105L

PB 92855

Hill, Thomas C. and Shaw, Robert S.

Proposed tumbling studies. Mar 1948. 12p tables, graph Mi $1.75 Ph $2.50

1. Falling

PB 91245

Hydrawerk A. G., Berlin

Specifications for insulating materials, etc. 1938-1939. 52f Mi $2.75 Enl Pr $8.75

See also BIOS FR 893, Item 1,7,22,31 Appendices 13-19 (PB 75859)

See also Micro BIOS FD 2586/46 (PB 91239); Micro BIOS FD 2590/46 (PB 91243); and Micro BIOS FD 2592/46 (PB 91245)

See PB 91245s for abstracts 2p Mi $1.25 Ph $1.25

1. Insulating materials—Germany 2. Micro BIOS FD 2592/46, Frames 1-50

PB 70145t7

I. G. Farbenindustrie A. G., Frankfurt am Main, Ger.

Process for producing synthetic fibers and films from viscose with reduced alkali-solubility. Jan 1949. 5p Available from Research Information Service, 509 5th Ave., New York 17, N. Y. $8.50

Translation 7 of PB 70145

See PB 70145 for subject headings

1. Micro FIAT J 5, Frames 268-269, translation

PB 93002

I. G. Farbenindustrie A. G., Schkopau, Ger.

Various types of Schopper testing equipment for rubber, fabrics, paper and electric insulating materials. 1934-1944. 29f (Text in German) Mi $2.00 Enl Pr $5.00

See also Micro BIOS FD 1643/47 (PB 90580); FD 1659/46 (PB 90753)

See PB 93002s for abstracts. 2p. Mi $1.25 Ph $1.25

1. Rubber—Testing equipment—Germany 2. Fabrics—Tests—Germany 3. Paper—Tests—Germany 4. Insulation, Electrical—Materials—Tests—Germany 5. Micro BIOS FD 2382/47, Frames incorrectly numbered

PB 96662

Jackson, John B. and Thomas, William U.

Test of air-purification unit of paint-spray respirator EIR3. Oct 1948. 22p drawings, diagrs, tables Mi $2.00 Ph $3.75

1. EIR3 (Respirator) 2. Respirators, Paint-spray—Air purification units—Tests 3. CC TCR 10

PB 95658

Japan. Ministry of Education, Scientific Education Bureau. Scientific Data Section.

Short biography of Japanese Scientists, 1948, Vol. V—1. (Mining). 1948. 34p Mi $2.25 Ph $5.00

1. Scientist—Biography—Japan 2. Supreme Commander for the Allied Powers.

PB 95076

Kameyama, Naoto and Makishima, Shoji

Studies on theories, preparations and applications of phosphorescent and fluorescent bodies. Nov 1944. 296p photos, diagrs, graphs, tables (Text in Japanese and English) Mi $9.00 Ph $37.50

1. Phosphorescence—Japan 2. Fluorescence—Japan

PB 95666

Kato, Yoshio and Shoji, Rikii.

Prospecting of the underground structure of the new volcano "Showashinzan" by the seismic method. n.d. 1p graphs Mi $1.25 Ph $1.25

1. Showashinzan (Volcano) 2. Volcanoes—Research 3. Tohoku Imperial University. Geophysical Institute, Sendai, Japan

PB 95661

Kioka Magnetic Observatory and others.

List of the provisional reports of the geomagnetic observations during the annular eclipse on May 9, 1948. 1948. 30p Mi $2.00 Ph $3.75

1. Solar eclipses 2. Geomagnetism 3. Magnetism, Terrestrial

—82288

PB 96296

Preussische akademie der wissenschaften. (Miscellaneous lectures).

Archiv für das eisenhüttenwesen. (Archives for iron metallurgy). v. 16, Nos. 7-12. 1943. v. 17, Nos. 1-12. 1943/1944. v. 18, Nos. 7-8. 1945.

Archiv für elektrotechnik. (Archives for electrical engineering). v. 38, Nos. 1-4. 1944.

Archiv für wärmewirtschaft und dampfkesselwesen. (Archives for heat economy and boiler practice). v. 22, Nos. 5-12. 1941. 728f (Text in German) Mi $9.00 Enl Pr $93.75

See PB 96296s for abstracts. 18p. Mi $1.75 Ph $2.50

1. Heating—Periodicals—Germany 2. Engineering, Electrical—Periodicals—Germany 3. Metallurgy—Periodicals—Germany 4. Astronomy—Germany 5. Mathematics—Germany 6. Biology—Germany 7. Ceramics—Germany 8. Micro FIAT K 46, Frames 801-1529

PB 95632

Royal Swedish Academy of Engineering Sciences.

IVA (Periodical of Scientific Engineering Research.). 1948. 63p photos, graphs, tables Mi $3.00 Ph $8.75

Text in English or Swedish

1. Engineering—Periodical—Sweden

PB 95648

Supreme Commander for the Allied Powers. Economic and Scientific Section.

Japanese economic statistics. Sep 1948. 121p tables, graphs Mi $5.00 Ph $16.25

1. Economic statistics—Japan

PB 95313

Supreme Commander for the Allied Powers. Economic and Scientific Section, Research and Programs Div.

Japanese economic statistics. Aug 1948. 104p graphs, tables Mi $4.50 Ph $13.75

1. Economic statistics—Japan 2. SCAP ESS B 24

PB 95269

U. S. Air Force and U. S. Navy Dept.

Polish: Aluminum. Air Force-Navy aeronautical bulletin. Sep 1948. 2p Mi $1.25 Ph $1.25

1. Aluminum polish 2. AN AB 359 3. AN-P-88

PB 84928

U. S. Signal Corps.

Miscellaneous material dealing with electrical and electronic research together with certain technical research on aeronautical research. 1939-1944. 1519f Mi $9.00 Enl Pr $197.50

This reel consists of reprints from "Philips' Technische Rundschau", (developments in electrical and electronic research at N. V. Philips' Gloeilampenfabrieken, Eindhoven, Holland): Vol 4, No. 9

and 12, 1939; Vol 5, No 1, 3, 8, 9, 10, and 11, 1940; Vol 6, No 1, 3, 5, 6, 8, 10, and 12, 1941; and Vol 7, No 1-4, 1942; reprints from "Technische Berichte der Zentrale für Wissenschaftliches Benchstweren der Luftfahrtforschung", (German Aeronautical Research technical reports): Vol 10, No 1-3, 1943 and Vol 11, No 2, 1944. Micro SIG IS 46, Frames not numbered

PB 84918

U. S. Signal Corps.

Miscellaneous material dealing with instruments, electronic research, radio equipment, etc. 1932-1943. 1263f diagrs, tables Mi $9.00 Enl Pr. $165.00

This microfilm reel consists of the following material: Catalogs of measuring instruments for use in radio and supersonics, from the Physikalisch—Technisches Entwicklungslabor Drs. Rohde & Schwarz, Munich, and Hartmann & Braun, A. G. Frankfurt A. M.; technical manuals for Philips' PHP21 high frequency generators, GM6004 voltmeters, and low frequency heat-note oscillators; reprints from Hochfrequenztechnik und Elektroakustik, Vol 47, 1936, Vol 53, 1939, and Vol 55, 1940. Archiv für technisches Messen, Mar, June and Sep 1935 and Sep 1937. Elektrolechnische Zeitschrift. Vol 60 No 31, 1939. Vol 61 No 23 and 25, 1940, and Vol 64 No 27, 1943; also miscellaneous electronics data and research reports. In German. Some frames on this reel are illegible. Micro SIG IS 36, Frames not numbered

PB 84915

U. S. Signal Corps.

Miscellaneous reports covering seismology, fire control equipment, airborne radar equipment, electronic research, etc. 1936-1944. 1459f drawings, tables Mi $9.00 Enl Pr $188.75

This microfilm reel contains: (1) Reports covering seismological research & La Place transformations, (2) descriptions of "Reinecke" fire control equipment for antitank weapons and "Askonia" remote control systems; (3) articles on the "Theory of cathode fall of potential", "Demagnetization of Spheroids", and "Quartz band filters;" (4) drawings of "Meddo" airborne radar equipment; and (5) miscellaneous electronics research reports. In German. Some frames on this reel will not reproduce well. Micro SIG IS 33, Frames not numbered

PB 84917

U. S. Signal Corps.

Miscellaneous research reports covering electron microscopy wave propagation together with specification for power plants and equipment. 1935-1945. 1747f diagrs, tables Mi $9.00 Enl Pr $226.25

This microfilm reel consists of research reports covering electron microscopy wave propagation etc., in addition to VDE (German Society of Electrical Engineers) specifications for power plants and equipment. Many frames on this reel will not reproduce well. Micro SIG IS 35, Frames not numbered

PB 84929

U. S. Signal Corps.

Reprints dealing aeronautical research together with drawings for radio equipment and miscellaneous electronic research reports. 1943-1944. 1389f tables, graphs Mi $9.00 Enl Pr $180.00

This reel consists of reprints from ZWB Technische Berichte, Vol 11 Nos 1-12, 1944 (aeronautical research reports) in addition to detail and assembly drawings for radio equipment and miscellaneous electronic research reports. Micro SIG IS 47, Frames not numbered

PATENTS

Chemicals and Allied Products

PB 73604t5

Deutsche Gold- und Silberscheideanstalt, Frankfurt am Main, Ger.

Process for manufacturing highly concentrated nitro-cellulose dispersions using casein as dispersing agent. Sep 1948. 10p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $14.00

1. Dispersions—Preparation—Germany 2. Micro FIAT C 194, Frames 9161-9165, trans.

PB 95446

Glassner, Alvin

Extension of dry battery cell life through improvement in electrolyte-absorbent element. n.d. 5p drawing Mi $1.25 Ph $1.25

1. Cells, Dry—Inventions 2. Electrolytic cells—Breakdown—Inventions 3. Corrosion, Electrolytic—Inventions

PB 20526t

I. G. Farbenindustrie A. G., Frankfurt am Main, Ger.

Process for producing ascorbic acid. Aug 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $6.00

1. Ascorbic acid—Production—Patents—Germany 2. Patents—Switzerland 180810 3. Micro FIAT Patents 148, Frames 1376-1378, trans.

PB 70155t9

I. G. Farbenindustrie A. G., Höchst, Ger.

The concentrating of nitric acid. May 1948. 18p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $28.50

1. Nitric acid—Production—Patents—Germany 2. G. P. 398320 3. Micro FIAT L 1, Frames 220-230, trans.

PB 20543t2

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Process for converting multivalent phenols into univalent phenols. Aug 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.25
1. Phenols—Conversion—Germany 2. Micro FIAT Patents 159, Frames 4755-4757, trans.

PB 73604t

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Process for manufacturing resinous sulfonamide formaldehyde condensation products. Sep 1948. 8p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $6.00
1. Condensation products—Patents—Germany 2. Micro FIAT C 194, Frames 9604-9606, trans.

PB 20543t

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Process for producing high-molecular weight polymers from acrolein. Sep 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $7.50
1. Polymerization products—Manufacture—Patents—Germany 2. Micro FIAT Patents 159, Frames 4591-4593, trans.

PB 20543t3

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Stabilizing agents for after-chlorinated polyvinyl chloride. Sep 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.75
1. Plastics—Patents—Germany 2. Polyvinyl chloride—Stabilizers—Germany 3. Micro FIAT Patents 159, Frames 4814-4816, trans.

PB 25609t

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Easily removable lubricants containing higher-boiling hydrocarbons. 1948. 7p Available from Research Information Service, 509 Fifth Ave., N. Y. 17, N. Y. at $15.00
Translation 1 of PB 25609
1. Lubricants—Analysis—Germany 2. Micro FIAT Patents 165, Frames unnumbered, trans.

PB 96849

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Patent applications relating to amines and amides. 1940. 23f (Text in German) Mi $2.00 Enl Pr $5.00
See PB 96849s for abstracts. 1p. Mi $1.25 Ph $1.25
1. Amines—Preparation—Germany 2. Amides—Preparation—Germany 3. Micro BIOS FD 2384/48, Frames 1-22

PB 96848

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Patent applications relating to olefins. 1940. 31f (Text in German) Mi $2.25 Enl Pr $6.25
See PB 96848s for abstracts. 2p. Mi $1.25 Ph $1.25
1. Olefins—Preparation—Germany 2. Micro BIOS FD 2376/48, Frames 1-28

PB 25616t3

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Process for fully effective purification of ion exchange resins. Aug 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $7.00
1. Resins, Ion exchange 2. Micro FIAT Patents 172, Frames 624-626, trans.

PB 25613t4

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Process for preparing highly viscous aqueous solutions of polyacrylic acid salts. Sep 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $7.75
1. Chemical compounds, Organic—Patents—Germany 2. Polyacrylic acid, Sodium salt 3. Micro FIAT Patents 169, Frames 8608-8610, trans.

PB 91473

I. G. Farbenindustrie A. G., Schkopau, Ger.
Patent applications for processes using ion exchangers. 1940-1944. 544f (Text in German and French) Mi $9.00 Enl Pr $72.50
See PB 91473s for abstracts. 2p. Mi $1.25 Ph $1.25
1. Ions—Exchange—Germany 2. Micro BIOS FD 2182/47, Frames 1-517, 3. Micro BIOS DOC 2044/747/1-56/857/1.58.10/1370/1-3/1378/1, Frames 1-517

PB 19921t7

I. G. Farbenindustrie A. G., Wolfen, Ger.
Process for eliminating color deviations in prints due to faulty absorption of dyes in negative images. 1948. 7p drawings Available from Research Information Service 509 Fifth Ave., N. Y. 17, N. Y. at $9.50
Translation 7 of PB 19921
1. Micro FIAT Patents 145, Frames 5210-5215, trans.

PB 34208t

I. G. Farbenindustrie A. G., Wolfen, Ger.
Process for manufacturing viscose sponges. 1948. 3p Available from Research Information Service 509 Fifth Ave., N. Y. 17, N. Y. at $6.50
Translation 1 of PB 34208
Part of PB 19923

—62288

1. Micro FIAT Patents 143, Frames 2840-2842, trans.

PB 34266t

I. G. Farbenindustrie A. G., Wolfen, Ger.

Process for manufacturing wool-like continuous filaments from viscose. Dec 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.75

1. Micro FIAT Patents 143, Frames 3303-3305, trans.

PB 31658t

I. G. Farbenindustrie A. G., Wolfen, Ger.

Process for producing furfural. 1948. 5p Available from Research Information Service 509 Fifth Ave., N. Y. 17, N. Y. at $9.50

Translation 1 of PB 31658

1. Micro FIAT Patents 141, Frames 1036-1039, trans.

PB 31655t

I. G. Farbenindustrie A. G., Wolfen, Ger.

Process for working-up beechwood sulfite waste liquor. 1948. 8p Available from Research Information Service 509 Fifth Ave., N. Y. 17, N.Y. at $11.75

Translation 1 of PB 31655

1. Micro FIAT Patents 141, Frames 1023-1028, trans.

PB 45436t

I. G. Farbenindustrie A. G., Wolfen, Ger.

Simplified, time-saving production of rhodacyanines. Dec 1948. 9p Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $5.00

Translation of PB 45436

1. Micro FIAT Patents 144, Frames 3494-3500, trans.

PB 93614

Kümmel, Paul

Cements resistant to hydrocarbons. Jun 1948. 6p Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $4.00

1. Cements, Chemical resistant—Patents—Germany 2. GP 729025

PB 85172s91

Roos, Hans

DRP 741, 469-preparation of stilbene azo compounds. May 1943. 8p Mi $1.25 Ph $1.25

Supplement 91 to PB 85172

1. Dyes and dyeing—Germany 2. Stilbene—Intermediates—Patents—Germany 3. Patents—Germany—I 66934 IVd/22a, Apr 1940 4. GP 741469 5. I. G. Farbenindustrie A. G., Frankfurt am Main, Ger. 6. FIAT FR 1313-91

—62288

PB 85172s92

Schweitzer, Hugo and Bayer, Otto

DRP-743, 766-preparation of monoazo dyestuffs. May 1943. 4p (Text in German) Mi $1.25 Ph $1.25

Supplement 92 to PB 85172

1. Dyes and dyeing—Germany 2. Dyes, Azo—Preparation—Patents—Germany 3. Patents—Germany—I 66881 IVd/22a, Apr 1940 4. GP 743766 5. I. G. Farbenindustrie A. G., Frankfurt am Main, Ger. 6. FIAT FR 1313-92

PB 94639

Szombathy, von (Dr.)

Sulfur extracting process of the Sachtleben A. G. Szombathy-process, Ger pat. appl. S117,702. n.d. 4p drawing Mi $1.25 Ph $1.25

1. Sulfur—Recovery—Patents—Germany 2. Sachtleben A. G., für Bergbau und Chemische Industrie, Bruckdorf, Ger.

PB 94640

Theisen, Edward

Multistage gas-scrubbing. German Patent No. 388, 857. Jan 1924. 9p fold drawing, table Mi $1.25 Ph $1.25

1. Gases—Purification—Patents—Germany

PB 94638

Theisen, Edward

Process for the purification of gases, air, vapors, etc. German Patent No. 513,288. Nov 1930. 2p drawing Mi $1.25 Ph $1.25

1. Gases—Purification—Patents—Germany

Electrical Machinery, Equipment and Supplies

PB 85194

Auszüge Deutscher patent-anmeldungen. Band IV: Elektrotechnik. Klasse 21 g, 21 h, (Abstracts of German patent applications. Vol IV. Electrical Engineering classes 21g, 21h). (Vol. 5 of the series). Oct 1947. 922p (Text in German) Printed copy: $5.00 (Bib. v. 9, p. 271)

See also PB 85155, PB 85191 and PB 85195

1. Engineering, Electrical—Patents—Germany 2. Electrical equipment—Patents—Germany

PB 95473

Clark, Charles B. and Petrich, Raymond O.

Improved means for measuring gain of amplifiers. n.d. 4p drawings Mi $1.25 Ph $1.25

1. Amplifiers—Adjustment—Inventions

PB 95464

Coleman, Paul D.

Improvement in low pass RF filters. n.d. 4p drawings Mi $1.25 Ph $1.25

1. Filters, Radio frequency—Inventions

PB 95567

Dibble, Frank B.

Commutator apparatus for storing and discharging energy in an electrical energy storage means. n.d. 7p Mi $1.25 Ph $1.25

1. Capacitors—Discharge—Inventions 2. Capacitors—Inventions 3. Capacitors—Discharge—Patents

PB 95451

Forsbergh, Peter W. and Hutchinson, Franklin.

Improvement in vacuum tubes utilizing sintered type cathodes. n.d. 5p drawing Mi $1.25 Ph $1.25

1. Cathodes, Thermionic—Inventions

PB 70083

Germany. Reichspatentamt.

German patent applications class 21: Electrical engineering. Electronic equipment. 1934-1945. 974f illus (Text in German) Mi $6.00 Enl Pr $97.50 (Bib. v. 7, p. 67)

Individual items available only as enlargement prints are listed on pages 67-73, V. 7 of the Bibliography

1. Micro FIAT D 48, Frames 1-389 2. Micro FIAT D 48, Frames 9406-9999

PB 83416

Germany. Reichspatentamt.

German patent applications on general electrical appliances (auxiliary and components); patent class 21g. 1937-1945. 799f (Text in German) Mi $9.00 Enl Pr $101.25

1. Electrical equipment—Patents—Germany 2. Micro FIAT C 114, Frames 3722-4516

PB 95461

Gillette, Frank N.

An improved multivibrator. n.d. 7p drawings Mi $1.25 Ph $1.25

1. Circuits, Multivibrator—Inventions

PB 95450

Hare, Donald G. C.

Improvement in grid modulators. n.d. 5p drawing Mi $1.25 Ph $1.25

1. Tubes—Electron—Inventions 2. Radio transmitters—Inventions 3. Modulators—Inventions

PB 95463

Johnson, Kenneth W.

A shock and vibration resistant connector. n.d. 5p drawings Mi $1.25 Ph $1.25

1. Connectors—Electric—Inventions

PB 95474

Kamm, George N.

Improved electronic voltage regulator. n.d. 4p drawings Mi $1.25 Ph $1.25

1. Voltage regulators—Inventions 2. Electronic devices—Inventions

PB 95460

Kester, Robert E. and Quincy, William S., Jr.

An improved demountable fairlead assembly. May 1944. 6p drawings Mi $1.25 Ph $1.25

1. Antennas, Aircraft—Design—Inventions

PB 95449

Klein, Norman E.

Improved electrical connectors. n.d. 5p Mi $1.25 Ph $1.25

1. Connectors—Electric—Inventions 2. Connectors, Pressure-tight—Inventions

PB 95471

Livingood, John J.

Improvement in resnatron tubes. n.d. 4p drawings Mi $1.25 Ph $1.25

1. Tubes, Oscillator—Inventions 2. Tubes, Resnatron—Inventions

PB 95445

Mayer, William G.

Improvement in method of controlling igniter tubes at high voltage. n.d. 4p drawing Mi $1.25 Ph $1.25

1. Igniters—Composition—Inventions 2. Voltage regulators—Inventions

PB 95465

Meador, Bernal M. and Sullivan, Clarence H.

An improved stub antenna mounting plate. n.d. 6p drawings Mi $1.25 Ph $1.25

1. Antennas, Stub—Inventions

PB 95470

Newell, Stanley E.

Improved radar device. n.d. 9p drawings Mi $1.25 Ph $1.25

1. Radar direction finders—Inventions 2. Radar—Homing devices—Inventions 3. Radar—Airborne equipment—Inventions

PB 95475

Petrich, Raymond O. and Woods, John P.

An improved wide-band UHF amplifier. n.d. 6p drawings Mi $1.25 Ph $1.25

1. Electrical equipment—Inventions 2. Amplifiers, Ultra high frequency—Inventions

PB 95457

Raymond, Richard C. and Salisbury, Winfield W.

Cavity resonator having means for rapid tuning. n.d. 4p Mi $1.25 Ph $1.25

1. Resonators, Cavity—Inventions 2. Electrical equipment—Inventions 3. Radio—Tuning devices—Inventions

PB 95454

Record, Frank A.

Improvement in transfer of radio frequency energy between coaxial lines and wave guides. n.d. 5p drawing Mi $1.25 Ph $1.25

1. Radio transmission lines—Inventions 2. Energy—Transmission—Inventions 3. Wave guides, Coaxial—Inventions

PB 95455

Record, Frank A.

Improvement in tunable cavity resonators. n.d. 7p drawings Mi $1.25 Ph $1.25

1. Resonators, Cavity—Inventions 2. Radio—Tuning devices—Inventions

PB 95456

Richards, Paul I.

An improved coaxial type, wide pass band RF filter. n.d. 3p Mi $1.25 Ph $1.25

1. Filters, Radio frequency—Inventions

PB 95459

Turnbull, John C.

Coaxial transmission line having low attenuation and low standing wave ratio. n.d. 4p drawing Mi $1.25 Ph $1.25

1. Electrical—Equipment—Inventions 2. Radio transmission lines—Inventions 3. Attenuators—Radio frequency—Inventions 4. Coaxial lines—Inventions

PB 95447

Van Atta, Lester C.

Improvement in method of obtaining circular polarization in wave guides of circular cross-section. n.d. 6p drawing Mi $1.25 Ph $1.25

1. Circuits, Clamping—Inventions 2. Polarization—Inventions 3. Polarization, Elliptical—Inventions 4. Wave guides—Bends—Inventions

PB 95448

Van Voorhis, Stanley N.

AF modulated RF communication system. n.d. 6p drawing Mi $1.25 Ph $1.25

1. Communication, Carrier current—Inventions 2. Pulse circuits—Inventions 3. Pulse communication—Inventions 4. Radio communication—Inventions

PB 95444

Wagner, Herbert M.

Improvement in resonance characteristics of power supply leads for UHF vacuum tubes. n.d. 6p drawing Mi $1.25 Ph $1.25

1. High frequencies—Inventions 2. Circuits, Resonant—Inventions 3. Electronic devices—Inventions 4. Impedance—Inventions 5. Tubes—Election—Inventions

PB 95472

Wedell, John J.

Improved electronic voltage regulator. n.d. 5p drawings Mi $1.25 Ph $1.25

1. Circuits—Measuring—Equipment—Inventions 2. Circuits—Voltage multiplier—Inventions

PB 95458

White, Warren D.

Improved means for modulating radio frequency transmitter. n.d. 4p drawing Mi $1.25 Ph $1.25

1. Frequency modulation—Inventions 2. Radio transmitters—Fidelity—Inventions 3. Electrical equipment—Inventions

PB 95468

Winter, David F.

Improved shielding for cathode ray tubes. n.d. 11p drawings Mi $1.75 Ph $2.50

1. Vacuum tubes, Cathode ray—Inventions

PB 95469

Ziedler, Howard M.

Improved modulation control of reflex klystron tubes. n.d. 4p drawings Mi $1.25 Ph $1.25

1. Vacuum tubes—Klystron—Inventions 2. Frequency modulation—Inventions

PB 95466

Zierdt, Conrad H., Jr.

Improved high speed automatic keyer for radio transmitters. n.d. 18p drawings Mi $1.75 Ph $2.50

1. Radio communication—Inventions 2. Radio—Remote control—Inventions 3. Radio transmission—Single sideband—Inventions

PB 95467

Zierdt, Conrad H., Jr.

Improved remote controlled (Radio) device. n.d. 7p drawing Mi $1.25 Ph $1.25

1. Aircraft, Pilotless—Inventions 2. Radio—Remote control—Inventions 3. Communications—Equipment—Inventions

Instruments

PB 25612t4

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Work pieces with tough core resistant to edge compression and wear. Jun 1948. 5p Available from Research Information Service, 509 Fifth Ave., N. Y. 17, N. Y. $4.25

1. Valves, High pressure—Patent—Germany 2. Micro FIAT Patents 168, Frames 6761-6762, trans.

PB 93596

Instrumente. Klassen 42, 51. (Auszüge. Deutscher patent-anmeldungen). Instruments. Classes 42, 51. (Abstracts of German patent applications). (Vol. 10 of the series). n.d. 101p (Text in German) Mimeo: $5.00 (Bib. v. 10, p. 336)

1. Instruments, Optical—Patents—Germany 2. Musical instruments—Patents—Germany 3. Series: Auszüge Deutscher patent-anmeldungen. Vol. 10

PB 95476

Prohammer, Frederick G.

Shock tester trip mechanism. n.d. 5p drawings Mi $1.25 Ph $1.25

1. Impact tests—Inventions 2. Impact gages—Inventions

PB 73321t3

Siemens & Halske A. G., Berlin.

Process for magnification by combined electron-optical and light-optical means. 1948. 12p drawing, graphs Available from Research Information Service 509 Fifth Ave., N. Y. 17, N. Y. at $15.75

Translation 3 of PB 73321

1. Microscopes, Electron—Patents—Germany 2. Micro FIAT B 51, Frames 2389-2397, trans.

Machinery (except Electrical)

PB 81800

Auszüge Deutscher patent-anmeldungen: Brennkraftmaschinen. (Klasse 46). Extracts of German patent applications: - Internal combustion engines. (Class 46). Mar 1947 712p (Text in German) Printed copy $5.00 (Bib. v. 7, p. 79)

1. Engines, Internal combustion—Patents—Germany 2. Servomechanisms—Patents—Germany

PB 88833

Auszüge deutscher patent-anmeldungen. Hebezeuge. Klasse 35, 81. (Abstracts of German patent applications. Lifting mechanisms. Classes 35, 81). (Vol. XIV of the series). Feb 1948. 427p Mimeo: $5.00 (Bib. v. 10, p. 143)

1. Lifting mechanisms—Patents—Germany 2. Patents—Bibliography—Germany

PB 85193

Auszüge Deutscher patent-anmeldungen. Wärmetechnik, etc. Klasse 13, 14, 24, 17, 60, 27, 59, 82, 88. (Abstracts of German patent applications. Thermal engineering. Classes 13, 14, 24, 17, 60, 27, 59, 82, 88). (Vol. 9 of the series). Oct 1947. 972p (Text in German) Printed copy: $5.00 (Bib. v. 9, p. 356)

1. Mechanical engineering—Patents—Germany 2. Steam engineering—Patents—Germany

PB 93572

Bergbau, etc. Klassen 5, 1, 10, 26, 32, 80. (Auszüge Deutscher patent-anmeldungen). Mining, etc. Classes 5, 1, 10, 26, 32, 80. (Abstracts of German patent applications). (Vol. 15 of the series). n.d. 693p (Text in German) Mimeo: $5.00 (Bib. v. 10, p. 336)

1. Mines and mining—Patents—Germany 2. Series: Auszüge Deutscher patent-anmeldungen, Vol. 15

PB 45534t

I. G. Farbenindustrie A. G., Wolfen, Ger.

Devices making a single dyeing machine usable for various package sizes. 1948. 7p drawing Available from Research Information Service, 509 Fifth Ave., N. Y. 17, N. Y. $12.50

1. Machines, Dyeing—Patents—Germany 2. Micro FIAT Patents 144, Frames 4040-4044, trans.

PB 95566

Wilkes, Norman A.

Nut drivers. n.d. 6p drawing Mi $1.25 Ph $1.25

1. Drivers, Nut—Inventions

Metals and Metal Products

PB 70145t4

Dawihl, Walter

Process for manufacturing molded parts from aluminum or aluminum alloy powders. May 1948. 6p Available from Research Information Service, 509 Fifth Ave., N. Y. 17, N. Y. $8.50

1. Aluminum powders—Molding—Patents—Germany 2. Molded products—Patents—Germany 3. Micro FIAT J 5, Frames 777-778, trans

PB 91416

Germany. Reichsluftfahrtministerium.

Patents relating to the production of metals for aircraft construction. 1938-1939. 139f (Text in German) Mi $5.50 Enl Pr $18.75

Abstracts available as PB 91416s. 4p. Mi $1.25 Ph $1.25

1. Airplanes—Materials—Metals—Germany 2. Micro BIOS FD 5565/45, Frames 1-139

PB 84419s

Germany. Reichspatentamt.

Testing the metal content of ores. 1936-1944. 2p Mi $1.25 Ph $1.25

Supplement to PB 84419

1. Klöckner-Humboldt-Deutz A. G., Cologne, Ger. 2. Micro FIAT H 113, Frames 1499-2241, abstracts

PB 84410s

Germany. Reichspatentamt.

Testing the metal content of ores. 1936-1944. 2p Mi $1.25 Ph $1.25

Includes abstracts for Micro FIAT H 113 (PB 84419) and H 114 (PB 84412)

1. Klöckner-Humboldt-Deutz A. G., Cologne, Ger. 2. Micro FIAT H 115, Frames 3014-3843, abstracts

PB 84412s

Germany. Reichspatentamt.

Testing the metal content of ores. 1936-1944. 2p Mi $1.25 Ph $1.25

Supplement to PB 84412

PB 84412s included in PB 84410s

1. Klöckner-Humboldt-Deutz, A. G., Cologne, Ger. 2. Micro FIAT H 114, Frames 2242-3013, abstracts

PB 66856t

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Process for manufacturing hard metals. Apr 1948. 3p Available from Research Information Service, 509 Fifth Ave., N. Y. 17, N. Y. $3.75
1. Metals—Production—Germany 2. Micro FIAT Patents 165, Frames 4396-4397, trans.

PB 25610t

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Process for roasting sulfidic ores. Jun 1948. 5p Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $8.25
1. Ores—Processing—Patent—Germany 2. Micro FIAT Patents 166, Frames 5122-5126, trans.

Paper and Allied Products

PB 25616t2

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Manufacture of weatherproof, flame-resistant paper. Aug 1948. 2p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $2.00
1. Paper, Fire resistant 2. Paper, Weatherproof 3. Micro FIAT Patents 172, Frame 294, trans.

Photographic and Optical Goods

PB 95452

Hunt, Stanley P.
Electronically controlled rotating shaft device. n.d. 7p drawings Ml $1.25 Ph $1.25
1. Cameras—Controls—Inventions

PB 45597t2

I. G. Farbenindustrie A. G.
Photographic material for producing direct positives by means of the Sabattier effect. Apr 1948. 8p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $5.50
1. Patents—Germany—I 60502 IVa/57b 2. Micro FIAT Patents 144, Frames 4535-4537, trans.

PB 45473t2

I. G. Farbenindustrie A. G.
Process for producing wash-off reliefs. Apr 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.75
1. Micro FIAT Patents 144, Frames 3692-3694, trans.

PB 19921t2

I. G. Farbenindustrie A. G., Wolfen, Ger.
Fog-preventing reducing agents for color films. Aug 1948. 6p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $8.75
1. Coatings, Anti-halation—Patents—Germany 2. Films (Photography), Color—Development—Patents—Germany 3. Patents—Germany—I 59739 IVc/12c 4. Micro FIAT Patents 145, Frames 4645-4648, trans.

PB 19920t7

I. G. Farbenindustrie A. G., Wolfen, Ger.
Improved process for producing mask images on multi-layer color films. Nov 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $5.75
1. Micro FIAT Patents 146, Frames 6023-6025

PB 45555t

I. G. Farbenindustrie A. G., Wolfen, Ger.
Motion picture projector with compensation for image migration. Jun 1948. 6p Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $8.75
1. Micro FIAT Patents 144, Frames 4148-4153, trans.

PB 19920t

I. G. Farbenindustrie A. G., Wolfen, Ger.
New substances for manufacturing photographic layers. Aug 1948. 7p Available from Research Information Service, 509 Fifth Avenue, New York, N. Y. $5.00
1. Photography, Color—Patents—Germany 2. Films (Photography)—Emulsions—Patents—Germany 3. GP 580366 4. Micro FIAT Patents 146, Frames 5544-5546, trans.

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PB 34238t

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Process for photomechanical production of copying stencils from relief-point types. Nov 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $9.75

1. Micro FIAT Patents 143, Frames 3097-3101, trans

PB 19920t2

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PB 19921t5

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Process for production of stereoscopic color pictures. Aug 1948. 7p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $9.50

1. Photography, Stereochrome—Patents—Germany 2. Micro FIAT Patents 145, Frames 5123-5127, trans.

PB 94835

Ossenbrunner, A. and others.

Production of films of high mechanical qualities from solutions of acetyl cellulose. Jun 1948. 7p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $6.50

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Textiles and Textile Products

PB 74390t25

Buchinger, Hermann

Adjustable spinning rings for continuous spinning process. Apr 1948. 7p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.00

1. Spinning frames, Ring—Patents—Germany 2. Micro FIAT C 157, Frames 3341-3342, trans.

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Fischer, Wilhelm

Device for doffing cops from spindles of ring spinning frames and ring twisters and for replacing the tubes. Apr 1948. 14p drawings Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $17.50

1. Spinning frames—Germany 2. Micro FIAT C 157, Frames 4046-4059, trans.

PB 74390t21

Gehlert & Soehne

Appliance for manufacture of effect threads. May 1948. 13p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $13.75

Translation of PB 74390, Frames 3383-3392

1. Yarn—Production—Patents—Germany 2. Micro FIAT C 157, Frames 3383-3392, trans.

PB 74390t20

Gehlert & Soehne

Process and appliance for manufacturing crepe yarn of rayon filaments of staple fibers. May 1948. 11p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $15.00

Translation of PB 74390, Frames 4030-4040, trans.

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Hamel, Carl A. G., Siegmar-Schönau, Ger.

New process and appliance for manufacturing multiple-ply yarn. May 1948. 9p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $12.00

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Single-stage process for wet spinning and drying of yarn. May 1948. 6p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $4.50

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PB 20543t4

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Process for imparting washfast water-repellency to rayon staple and cotton goods. Sep 1948. 12p Available from Research Information Service, 509 Fifth Avenue, New York, N. Y. $17.50

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PB 20543t8

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Process for manufacturing spirally curled yarns of improved properties from rayon staple. Dec 1948. 4p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $4.00

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PB 34243t

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Process and appliance for preparing weaving and knitting yarns from rayon staple fibers. Dec 1948. 5p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $7.50

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PB 74390t23

Jute-Spinnerei und Weberei Bremen A. G., Delmenhorst, Ger.

Process and appliance for spinning paper. May 1948. 6p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $4.25

Translation of PB 74390, Frames 3927-3929

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PB 74390t16

Kluftinger, Hermann

Process and appliance for spinning long and short slivers simultaneously. May 1948. 9p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $9.50

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PB 74390t18

Mechanische Baumwolle-Spinnerei & Weberei Kaufbeuren, Ger.

Appliance for removing dust from spinning frames by means of compressed air. May 1948. 8p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $7.00

Translation of PB 74390, Frames 3993-3999

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PB 74390t19

Mechanische Baumwoll-Spinnerei & Weberei Kaufbeuren, Ger.

Appliance for retrieving broken pieces of roving at the end rolls of spinning frames. May 1948. 9p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $10.00

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PB 74390t17

Schachne, G. S. tr.

Thread guide for wet spinning frames. Apr 1948. 5p drawings Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $3.50

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PB 74390t24

Solbrig, C. F. Söhne A. G., Chemnitz, Ger.

Spinning machine for improved spinning of short and long fibers which saves considerable manual work. Jun 1948. 30p Available from Research Information Service, 509 Fifth Ave., New York 17, N. Y. $31.50

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Transportation Equipment

PB 88831

Auszüge deutscher patent-anmeldungen. Eisenbahnbetrieb und bauwesen. Klasse 19, 20, 36, 37, 84, 85d-h. (Abstracts of German patent applications. Railroad operation and construction. Classes 19, 20, 36, 37, 84, 85d-h). (Vol. II of the series). n.d. 980p (Text in German) Mimeo: $5.00

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PB 74419

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German patent applications: Class 20c, railway equipment. 1937-1945. 815f Mi $9.00 Enl Pr $107.50

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PB 91424

Germany. Reichspatentamt.

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See PB 91424s for abstracts. 1p. Mi $1.25 Ph $1.25

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Non-fatty, water-soluble textile lubricants. Oct 1948. 6p Available from Research Information Service, 509 Fifth Avenue, New York 17, N. Y. $10.00

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